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SUBSTITUTE BLADDER

A REVIEW AND SHORT REPORT

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During recent years much discussion has arisen on the question of transplanting the ureters into the colon and the complications of this operation. In general, dissatisfaction is expressed and alternative methods, using a variety of techniques have been described. The Lancet[1] states 'there is clear need for further investigation, both clinical and experimental, of alternative procedures.' Pyrah[2] says, 'The operation of uretero-colic anastomosis is not a procedure like appendicectomy for gangrenous appendicitis or cholecystectomy for gall-stones, which finally removes from the patient a diseased organ which may be threatening life; it is rather a procedure which, by producing a fundamental change in the excretory arrangements of the body, often confers great benefits on the patient, but also carries risks of renal infection and derangement of the blood electrolytes that are sometimes inimical to health and occasionally dangerous to life. It is reasonable, therefore, that...attempts should be made to relieve the pathological process for which it is performed by some alternative procedure.'

Many years ago Coffey[3] and Stiles[4] described their methods of transplanting the ureters into the bowel. In both methods the free end of the ureter was drawn into the bowel and held by a suture; but whereas Coffey buried the ureter in a tunnel formed by bowel wall, Stiles buried the ureter in the manner of a Witzel gastrostomy. The usual late complication of these methods was a hydronephrosis due to stenosis at the anastomotic site. At post mortem, 25.8% of indirect implants showed narrowing or occlusion against 17.6% of direct cases (Jacobs).[5] Smith[6] was the first surgeon to report a direct mucosa-to-mucosa anastomosis; his case developed a faecal and urinary fistula which persisted for 14 months. Following the transplantation of the second ureter, the patient died. Necropsy revealed destruction of the first kidney due to infection. Nesbit[7] and Cordonnier[8] revived the direct anastomosis, using slightly different techniques. The incidence of stenosis fell but ascending infection continued. It would appear that its incidence may even have increased. Using the pneumopyelogram as a test Jacobs[5] demonstrated reflux in 20 out of 43 direct implants against 4 out of 45 indirect implants. The true figure is probably much higher if the excessive build-up of pressure in the colon during defaecation is borne in mind. Leadbetter,[9] in an effort to overcome reflux in the direct technique, buried the lower ureter in a tunnel formed by bowel wall. Pyrah[2] reports that with this operation his early results have been satisfactory. The immediate post-operative mortality rate for the different methods according to Jacobs[5] averages about 18—20%. This includes all causes; if cancer is excluded, the rate drops to 10%. The immediate morbidity rate is 40%.

It is well known that patients suffering from a variety of renal conditions, e.g. congenital hydronephrosis, congenital cystic kidney, chronic pyelonephritis and chronic nephritis, may continue in good general health for many years. They finally come under the care of the clinician and require hospital admission for severe exacerbations of infection or renal failure. In cases of transplant another factor, which is not clearly understood, comes into the picture. This condition is hyperchloraemic acidosis. It is generally agreed that selective absorption of chlorides occurs from the urine in the bowel. This hyperchloraemia is associated with a lowered alkali reserve and usually with a raised blood urea, and these changes appear to be progressive. The levels of sodium and potassium in the blood, although showing early changes, tend to approach normal after 6 months. Sodium shows a slightly raised level in 9.4% of cases whereas potassium is slightly depleted in 31%. The incidence of acidosis at 6 months is 81.7% as shown by a lowered alkali reserve; whereas 48.6% of cases suffer from a hyperchloraemia. Of these 71.6% have raised non-protein nitrogen. The reader is referred to Jacobs and Stirling's paper[5] in the B.A.U.S. series for further

particulars. These figures in general agree with other writers.

The majority of authorities agree that the healthy kidney can deal with the absorption of chlorides from the bowel and keep the acid-alkali imbalance under control. However, in the presence of hydronephrosis or pyelonephritis the mechanism breaks down and demonstrable and clinical acidosis appears. Kekwick *et al.*,[10] Lapides [11] and Creevy,[12] as well as many speakers discussing the B.A.U.S. series, all consider renal damage as essential to the development of the condition. It would therefore appear that hyperchloraemic acidosis is not a separate disease but a manifestation of renal damage. This damage would appear to be in the distal tubules since evidence is available that in disease of these tubules imbalance can occur even when the ureters have not been transplanted. Its clinical incidence may be used as evidence of renal dysfunction, which may not be demonstrable by means at our disposal for investigation of the living subject.

In the B.A.U.S. series the highest cause of death following sigmoid implantation was renal. This amounted to 301 out of a total of 1,029 deaths, or 18% of all cases operated upon. Cancer was the second highest, amounting to 298 or 17.8% of all cases. Thereafter the figure drops to 5.6% for pulmonary and 5.4% for 'other' causes. In the great majority the cause of the renal damage must be attributed to the operation. Jewitt [13] in a smaller series has a similar mortality of 18% due to renal causes.

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From these few figures one must agree that it is desirable to find an alternative procedure. With the introduction of more radical pelvic surgery, the need for some other means of draining away urine in place of sigmoid implants becomes imperative. Few patients will tolerate a wet colostomy. Cutaneous ureterostomy would need (in addition to the colostomy) two other skin stomata which require continuous drainage into collecting bags and, even with the recent attempts to form 'spouts', are seldom if ever dry on the surface.

The concept of using an isolated segment of bowel as a bladder has gained recognition and various methods have been tried with a measure of success. In 1908 Veerhogen [14] described a substitute bladder made from ileum, but the patient died shortly afterwards. Previous experimental work had been carried out by Tizzoni and Foggi [15] in 1888. Higgins [16] experimented with the lower rectosigmoid in dogs but found that after 2 years it contracted down to such an extent that its capacity was virtually *nil*. Other animal experiments are described where an isolated loop of bowel is anastomosed to the urethra (Thompson,[17] Rubin [18]), but the practical application of this operation to man is doubtful. Two main approaches have been used in man. In the first a loop of ileum, into which the ureters are transplanted, is isolated. One end is closed and the other brought to the surface as an ileostomy. Here the ileum acts merely as a conduit and the wearing of a Rutzen or similar bag is essential. This method is reported by several surgeons,[19–22] making a total of 113 cases.

In the second method an effort is made to construct a container within the abdomen which can be emptied intermittently by catheter. Gilchrist *et al.*[23] reported initially on this operation. The caecum and part of the ascending colon is mobilized and used as a bladder substitute. A short length of ileum is left attached and its cut end is brought out to the skin to act as a urethra. I have traced 52 such cases.[24–32]

In Bricker's series [19] of 106 cases of ileal conduits, 5 operative deaths are attributed to the ureteric part of the operation although all these cases were associated with pelvic exenteration. In 25 cases where no other procedure was performed, there were no deaths. Two deaths are reported after re-operation for unsatisfactory urinary drainage. Nine cases are classified as having grade-II or worse hydronephrosis. These are all symptomless and infection is absent. Three show progression in the size of the lesion and the remaining 6, diminution. Thirteen had evidence of pyelonephritis, but in those still living the attacks are mild and controlled by antibiotics. Two cases of hyperchloraemia acidosis are mentioned, but these 2 patients had previously been given a sigmoid transplant and developed severe acidosis. An ileum conduit was constructed to relieve this complication. Both cases are now symptomless. There have been no late deaths from renal causes. All these patients wear a Rutzen bag or similar type of stick-on ileostomy container. Wilson [22] reports a case of temporary acidosis occuring during the 2nd and 4th post-operative weeks. This patient's pre-operative urogram showed delayed excretion at 10 and 20 minutes. A later urogram was normal. Annis [20] reports 4 cases without complications and Bill *et al.*,[21] 2 cases.

In the caecal group, Merricks [26] reports the largest series, with 18 cases, and Harper [27] reports 7. One death due to renal causes is reported. Here transplantation was performed on the ureter of a sole remaining kidney. The patient developed anuria, but at post mortem this was shown to be due to obstruction and kinking of the ureter at the anastomotic site. The kidney was healthy. If a nephrostomy had been performed or the operation site inspected, Merricks feels the patient would have been saved. There were 2 cases of acidosis. In the first, the condition was controlled with sodium bicarbonate (but, in an addendum, it is stated the condition was no longer present). In the second case, it would appear that the electrolytic upset was due to a jejuno-colic anastomosis performed for acute obstruction. The kidneys and ureter were reported to be normal at necropsy. No cases developed pyelonephritis or hydronephrosis.

Bricker raises two objections to the caecal substitute. He feels the risk of acidosis is very much reduced if the urine is brought to the surface immediately. This supposition is shown to be incorrect in the above-mentioned cases and, as shown earlier, the reduction depends on the absence of renal damage. His second objection is that it is impossible to get the caecal bladder continent. Merricks reports that all his patients were continent. Peck,[28] Santander,[29] Schmitz [30] and Wenger [31] report 7 out of 7 cases continent. Harper's patients were all continent. Lapides [32] (4 cases) and Bricker [24] (6 cases) have the only patients reported incontinent.

A summary of these results is seen in Table I for comparison with the B.A.U.S. figures. In the latter series, the figures for complications do not apply to the whole series but only to the period since the recognition of acidosis and incidentally since the extensive use of antibiotics. The amazing drop in the incidence of late renal complications and deaths should be noted. 'Other' deaths in the table include death from recurrent carcinoma, pulmonary and cardiovascular complications and various abdominal complications such as peritonitis, ileus, burst abdomen, etc.

TABLE I

Operation	No. of Cases	Post-operative Deaths: Renal %	Post-operative Deaths: Others %	Hydronephrosis %	Pyelonephritis %	Acidosis %	Late Deaths: Renal %	Late Deaths: Others %
Sigmoid Implant	1,673	5·7	15·3	55	52	81·7	12·1	28·2
Ileal Conduit	113	6·1	8·8	7·9	11·5	0·8 temporary	0	27·4
Caecal Bladder	25	4	20	4	0	4 temporary	0	28

The indications for a substitute operation are as yet not clear cut. The follow-up period of the published work is too short for it to be said that a new operation, free of complications, has firmly established itself. Stones have been reported in the caecal bladder. The possibility of carcinoma developing as a result of long-continued irritation must be considered. The possible development of pyelonephritis and acidosis cannot be denied, although it seems unlikely that contracture of the substitute bladder, as reported by Jewitt [12] in the recto-sigmoid in dogs, will occur. Certain conditions admit of no practical alternative to this new procedure. In any operation requiring pelvic clearance, either a caecal bladder or an ileal conduit is essential. There are few conditions for which sigmoid transplantation has been advised, where today a substitute bladder would not be more acceptable from the point of view of post-operative longevity. In cases where the surgery is purely palliative, as in inoperable carcinoma of the bladder, and where only a short-term survival is expected, then sigmoid transplantation may still be the operation of choice, but only if carefully performed by the newer techniques.

EXPERIENCE OF THE AUTHOR

In selecting an alternative operation to sigmoid transplantation, I was largely influenced by the high percentage of continency in caecal bladders. The continuous wearing of a Rutzen bag, with the care involved, is not a practical proposition with the rural or tribal Bantu. (If the patient is not continent, nothing is lost and a Rutzen bag may be worn.) Furthermore, caecal bladders have a capacity of between 350 and 550 c.c., so that catheterization is only necessary 3—4 times a day and, if fluids are withheld for 3 hours before sleep, the greater number will remain dry during the night. It is to be remembered that the majority of cases on whom this operation is performed suffer from a nocturia due to their original complaint, and to have that nocturia reduced to once nightly, if necessary using an alarm clock, cannot be considered an added disability. On the other hand, it is an operative procedure which carries greater risks for the patient. It is more time-consuming and requires a bigger exposure, a greater mobilization of bowel is necessary, and the anastomosis is more difficult. For these reasons, its adoption as a routine in all patients is not advised. In poor-risk patients, or where other long procedures are performed at the same time, an ileal conduit may be the method of choice.

The choice therefore between an ileal conduit and a caecal bladder, in my view, is dependent on two factors. The immediate consideration is the ability of the patient to withstand a greater operative procedure with the possibility of more numerous and more severe complications. The other factor to consider is ability of the patient to deal with a post-operative disability. The rural and tribal Bantu can easily deal with a continent caecal bladder which he has to catheterize 3—4 times a day. His ability to deal with a Rutzen bag under primitive conditions is doubtful. The patient rapidly learns how to catheterize himself and is given an 18 French catheter on leaving the hospital. Continence may not be complete for 2—3 months, but most patients appear to be dry during the day after the first fortnight.

CASE REPORTS

Two cases are reported where the follow-up has been sufficiently long to demonstrate results and to show that the Bantu can satisfactorily deal with the residual debility. It is hoped to publish a follow-up on a larger series at a later date.

Case 1. A Bantu female aged 20, suffering from intractable vesico-urethro-vagino-rectal fistula. There was gross scarring and fixation of tissue. The anal sphincter was completely destroyed and the rectum split high up into the posterior fornix. A preliminary colostomy was performed and several attempts made to close the bladder fistula without success. No effort was made to repair the rectum on these occasions, so as to avoid any tension on the anterior sutures. Finally I repaired the rectum and reconstituted the anal sphincter. The colostomy was closed two weeks later and the patient has full faecal continence with voluntary control of the sphincter.

A substitute caecal bladder was made on 28 June 1954; the left ureter implanted by the method of Stiles and the right by the double-flap method. The post-operative course was smooth, but mucus production was excessive and the catheter required continuous changing. Since operation there have been no biochemical changes and an intravenous pyelogram at 2 months showed very mild dilation of the left kidney. The patient is fully continent day and night. A pyelogram done 6 months after operation demonstrates normal renal outlines. The girl is earning her living doing house-work.

Case 2. A Coloured male aged 55, suffering from a massive infiltrating carcinoma involving the whole of the left side of the

bladder but clinically not penetrating the wall. He was suffering from gross haematuria and his bladder was heavily infected. An intravenous pyelogram showed a left grade-III hydronephrosis and hydro-ureter. Blood and protein deficiencies were corrected before operation. A routine one-stage procedure including a total cysto-prostatectomy was carried out. The right ureter was implanted by Stiles's method, the left by the double-flap method. Post-operative convalescence was very slow but uneventful and at no time gave rise to concern. A post-operative intravenous pyelogram demonstrates normal kidneys and ureters on both sides. Blood chemistry is normal. I repaired a ventral hernia on this patient 6 months later. The opportunity was taken to inspect his peritoneal cavity. There were no enlarged glands and no evidence of recurrence. One small adhesion was present between a loop of ileum and the bottom of the pelvis. When last seen, he requested permission to return to farm work.

SUMMARY

A comparison is made between the well-established operation of sigmoid transplantation of the ureters and the newer operations.

The author's reasons for adopting the Gilchrist procedure are given.

The first 2 cases on whom this operation was performed are briefly described.

It is hoped to publish a larger series, with adequate follow-up, in the near future.

I wish to thank Dr. J. McLean, Medical Superintendent, Provincial Hospital, Port Elizabeth, for permission to report these cases.

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POLIOMYELITIS IN THE UNION

Following are the returns, supplied by the Union Department of Health, of cases notified under the Public Health Act as suffering from Poliomyelitis in the period 12 to 18 May 1955.

	European	*Non-European*
Transvaal:		
Nylstroom Municipality		1
Total for Transvaal		1
Cape Province:		
Cape Divisional Council		1
Matatiele Municipality		1
East London Municipality	1	
Alexandria	1	
Mt. Currie Divisional Council ..		1
Bellville	1	
Darling Municipality		1
Total for Cape Province ..	3	4
TOTAL FOR THE UNION ..	**3**	**5**

Union Department of Health Bulletin. Report for the 7 days ended 18 May 1955.

Plague, Smallpox: Nil.

Typhus Fever, Cape Province: No further cases have been reported from the Idutywa Magisterial district since the notification of 21 April 1955. This area is now regarded as free from infection.

Epidemic Diseases in Other Countries:

Plague: Nil.

Cholera in Calcutta (India); Chalna, Chittagong, Dacca (Pakistan).

Smallpox in Moulmein, Rangoon (Burma); Allahabad, Bombay, Calcutta, Cannanore, Delhi, Jodphur, Kanpur, Kozhikode, Lucknow, Tellicherry, Visakhapatnam (India); Dacca, Lahore (Pakistan); Nhatrang, Phanthiet, Saigon-Cholon, Tourane (Viêt-Nam); Mogadiscio (Somalia); Tanga (Tanganyika).

Typhus Fever: Cairo (Egypt).

BOOKS RECEIVED : BOEKE ONTVANG

The Management of Acute Poliomyelitis. By C. P. Stott, S.R.N., C.M.B. and M. Fischer-Williams, M.R.C.P. Ed. Pp. 99+xii with 43 illustrations. 12s. 6d. Edinburgh & London: E. & S. Livingstone, Ltd. 1955.

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Advanced Surgery of Cataract. By Daniel B. Kirby, M.D., F.A.C.S. Pp. 271+xi with 138 figures and 96 illustrations in full colour. £11. Philadelphia & Montreal: J. B. Lippincott Company. 1955.

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EDITORIAL

BONE REMODELLING

A bone is a wonderful thing. A long bone starts life as a bar of mesenchyme, without strength or form. It develops eventually into a light, tubular structure of immense strength, narrower in the middle than at the ends, and specially designed to withstand the enormous stresses and strains of normal daily activity. The centre becomes hollowed out to allow lightness and to act as a storehouse for marrow. Basic structure consists of strands of protein matrix impregnated with apatite (calcium triple phosphate with some carbonate), rather like reinforced concrete, which are laid down according to precise mechanical laws governed by the needs for strength in particular directions to withstand the prevailing forces.

As originally laid down from rows of cartilage cells the new bone consists of rather dense longitudinal strands of calcified osteoid—the primary trabeculae. The osteoclasts now play a major part in the remodelling of these trabeculae. (Let us leave aside the question of whether osteoclasts really directly 'eat away' bone—it is easier to consider them as doing so.) While osteoclasts remove portions of these trabeculae, osteoblasts will lay down more bone as needed. A particularly pretty example is the growth of a rib: osteoclasts remove bone from the inner sides of trabeculae while more bone is laid down on the other sides. In the long bones the external effect of this remodelling is the absorption of outer layers of bone, so as to produce the tapering which occurs as we travel from the epiphysis along the shaft. If this were not so an adult femur, for instance, would be the same width in the secondary trabeculae of the cortex, the spongy cancellous bone of the medulla and the actual marrow cavity.

In this intricate process of bone development it is natural that things may go wrong, and lead to disorders of remodelling. In these states the lower end (or metaphysis) of the femur shows well the abnormality in shape, which has been likened to an Erlenmeyer flask. The best known clinical condition is that of osteopetrosis (Albers-Schönberg, or marble bone disease). The bones are over-dense, probably because of deficient activity of osteoclasts. With high-penetration X-rays longitudinal lines may be seen which represent the non-remodelled primary trabeculae. Further

VAN DIE REDAKSIE

BEENVERVORMING

Been is iets wonderliks. In die begin bestaan 'n langbeen uit vrugbindweefsel en is dit sonder vorm of krag totdat dit uiteindelik in 'n ligte, pypvormige struktuur ontwikkel wat geweldig sterk is; dit is dan wyer aan die ente as in die middel en is spesiaal bestem om die geweldige eise van die normale daaglikse lewe te weerstaan. Die binneste is hol—derhalwe is die struktuur lig en is daar ook plek vir die murg. Basies bestaan die struktuur uit proteïenmatrysdrade wat met *apatite* (kalsium drievoudige fosfaat en 'n bietjie karbonaat) deurtrek is, wat, ietwat soos gewapende beton, ooreenkomstig streng meganiese wette gelê word al na gelang die noodsaaklikheid om in spesiale rigtings weerstand te bied.

Die nuwe been wat oorspronklik uit rye kraakbeenselle opgebou is, bestaan nou uit taamlik digte longitudinale verkalkte *osteoid*-drade—die primêre trabeculae. Beenvretende selle speel nou 'n groot rol in die vervorming van die trabeculae. (Ons behandel hier nie die vraagstuk of beenafbreekselle in werklikheid die been direk ‚wegvreet' of nie—dit sal makliker wees om aan te neem dat dit wel die geval is.) Terwyl dele van hierdie trabeculae deur beenafbreekselle verwyder word, word meer been deur beenvormende selle gebou al na gelang die vereistes. Die groei van 'n rib is 'n besonder mooi voorbeeld hiervan—been aan die binnekant van die trabeculae word deur beenafbreekselle verwyder terwyl meer been aan die buitekant gelê word. Die uitwendige uitwerking van hierdie vervorming van die langbene is die absorpsie van die buitenste beenlae sodat die been geleidelik dunner word van die epifise langs die pyp af—as dít nie die geval was nie, sou die pyp en die onder-ent van 'n volwasse dybeen byvoorbeeld ewe breed wees. Inwendige vervorming is verantwoordelik vir die digte sekondêre trabeculae van die skors, die sponsagtige been van die medulla en die werklike murgholte.

Met so 'n ingewikkelde proses van beenvorming is dit te verwagte dat dinge verkeerd kan gaan en steurings kan voorkom. Onder sulke omstandighede toon die onderste gedeelte (of metafise) van die dybeen die abnormaliteit in vorm duidelik—dit kan met die vorm van 'n Erlenmeyer-fles vergelyk word. Die bekendste kliniese toestand is dié van osteopetrose (Albers-Schönberg of marmerbeensiekte). Die been is te dig, waarskynlik omdat die osteoklaste nie bedrywig genoeg is nie. Met dieppenetrerende X-strale kan lengtelyne gesien word wat die nie-vervormde trabeculae verteenwoordig. Verdere interessante radiologiese bewyse van

interesting radiological evidence of lack of remodelling occurs in the frequent appearance of the outlines of smaller bones within bones; for instance a foetal-sized phalangeal shadow within the present phalanx. Further, the marrow cavities are exceedingly small, and the bones, despite their density, are liable to fracture because their substance has not been laid down in a sound mechanical manner.

Less severe lack of modelling is seen in the condition described by Pyle [1] as 'familial metaphyseal dysplasia', in which the metaphyseal regions are wide, as in osteopetrosis, but there is no excessive bone density, the cortex is thin, and the narrow cavity is reduced in size. Fractures may occur, and the condition appears to be inherited as a Mendelian dominant characteristic. In one family idiopathic osteoporosis accompanied it.[2] In a few cases this metaphyseal dysplasia has been combined with a severe and disfiguring overgrowth of bones of the skull and face—a variety of leontiasis ossea. This combination has been called 'cranio-metaphyseal dysplasia'.[2]

Other states which are associated with deficient bone remodelling and flask-like lower femora include the infiltration of Gaucher's disease and the marrow hyperplasia of the congential haemolytic anaemias, especially Cooley's type. Vitamin-A deficiency also produces a lack of remodelling in experimental animals, but plays no known part in the human syndromes.

Defects in remodelling with increased width in the mataphyseal regions can also be seen in other developmental osseous dystrophies such as multiple exostoses (diaphyseal aclasis of Keith) or enchondromatosis (Ollier's disease). In these, as in some other congenital dysplasias, the metaphyseal abnormality is plainly not of primary importance, and is here produced by a disruption in development due to the displaced islets of cartilage cells which appear in these regions. Finally temporary deficiency of remodelling may occur in various states such as lead poisoning and scurvy.

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'n vervormingsgebrek kan herhaaldelik gesien word in die voorkoms van buitelyne van kleinere bene binne in die bene; byvoorbeeld die skaduwee van 'n fetaalgrootte toonbeentjie binne die werklike toonbeentjie. Verder is die murgholtes besonder klein, en die bene ten spyte van hul digtheid, is geneig om te breek omdat hul stof nie op 'n deeglik meganiese manier gelê is nie.

'n Minder ernstige vervormingsgebrek word gesien in die toestand wat Pyle[1] as ‚familial metaphyseal dysplasia' beskryf—soos in osteopetrose is die metafisestreke uitgebrei, maar daar is geen uitermatige digtheid van die been nie, die skors is dun en die nou holte verklein. Breuke kan voorkom en dit blyk asof die toestand as 'n Mendeliaan-dominante eienskap oorgeërf word. In een familie het dit met idiopatiese osteoporose gepaard gegaan.[2] In 'n paar gevalle is hierdie ‚metaphyseal dysplasia' vergesel deur 'n ernstige en skendende beenaangroeisel aan die skedel en gesig ('n varieteit van leontiasis ossea) waarvoor die benaming ‚cranio-metaphyseal dysplasia' al gebruik is.

Ander toestande wat met beenvervormingsgebrek en flesvormige onderste dybene geassosieer is, is die infiltrasie van Gaucher se siekte en die murghiperplasie van aangebore hemolitiese bloedarmoede, veral die Cooley-tipe. 'n Tekort aan vitamien-A lei ook by proefdiere tot vervormingsgebrek, maar sover ons weet word dit nie in die menslike simptome-groep gevind nie.

Vervormingsgebreke met verdikking van die metafisestreke, kan ook gesien word in ander distrofië van die ontwikkelende been soos in veelvoudige eksostoses (*diaphyseal aclasis* van Keith) of enchondromatose (Ollier se siekte). In hierdie, soos ook in sommige ander aangebore dysplasië, is die metafise-abnormaliteit definitief nie van die grootste belang nie en word dit veroorsaak deur 'n onderbreking in die ontwikkeling wat te wyte is aan verplaasde kraakbeensel-eilandjies wat op hierdie plekke voorkom. Ten slotte kan 'n tydelike vervormingsgebrek by toestande soos loodvergiftiging en skeurbuik voorkom.

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BEDSIDE DIAGNOSIS IN HEART DISEASE

Heart disease has been generally regarded as a branch of medicine in which the arts of bedside diagnosis could be fully exercised. Sir James McKenzie showed how clinical study of the arterial and venous pulses, palpation of the praecordium and diligent auscultation would lead in most cases to an adequate diagnosis. Later the acumen of the physician was supplemented when Sir Thomas Lewis brought electrocardiography to the clinic and Sir John Parkinson established cardioscopy as an essential part of cardiac examination.

In 1939, when cardiac surgery became a reality and the demand for precise pre-operative diagnosis arose, complicated mechanical techniques were elaborated and for a time it seemed that the clinical arts would be washed away by a tidal wave of cardiac catheters, angiocardiograms, phonocardiograms, vectorcardiograms and ballistocardiograms. Fortunately this was a temporary phase and from the technical jungle a new appreciation of bedside investigation in heart disease has emerged. New physical signs have been discovered, many old ones have been evaluated again and invested with a new significance, and accurate *clinical* assessment of the most complicated structural and functional disorders of the heart has become possible.

In this connection we are pleased to note the significant contribution to bedside diagnosis recently published by Dr. V. Schrire and Dr. L. Vogelpoel from the cardiac clinic at Groote Schuur Hospital, Cape Town.[1] They have investigated many cases of tachycardia with regular rhythm and have shown how supraventricular tachycardia may be readily distinguished clinically from ventricular tachycardia.

In supraventricular tachycardia, as in the normal heart, there is only slightly asynchronous ventricular

contraction; the heart sounds are therefore minimally split. In ventricular tachycardia, where there is an ectopic pace-maker in one ventricle, ventricular contraction is markedly asynchronous and the splitting of the heart sounds becomes abnormally wide.

The intensity of the first heart sound depends on the position of the cusps of the auriculo-ventricular valve at the beginning of ventricular systole. In ventricular tachycardia there is dissociated auricular and ventricular activity and so the position of these cusps varies from cycle to cycle and the first heart sound accordingly has a varying intensity. As a further consequence of this dissociation, the right auricle often contracts against a closed tricuspid valve, producing large, irregular, independent 'cannon waves' in the jugular venous pulse. In supraventricular tachycardia, on the other hand, there is no auriculo-ventricular dissociation; the first heart sound therefore is of constant intensity and irregular venous 'cannon waves' do not occur.

Attention is drawn to the difficulty in distinguishing on a routine electrocardiogram between supraventricular tachycardia with bundle-branch block and ventricular tachycardia. The distinction is important because vagal stimulation or digitalis may be necessary for the former, whereas quinidine or procaine amide is the treatment of choice in the latter. The physical signs, however, may be more helpful than the electrocardiograph. In both cases, there is abnormally wide splitting of the heart sounds but in the supraventricular rhythm there are no irregular venous 'cannon waves' and the first heart sound is of constant intensity.

The authors are to be congratulated on the first publication from this newly-established clinic; further contributions will be anticipated with much interest.

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THE PREVALENCE OF PULMONARY TUBERCULOSIS IN THE DURBAN CLOTHING INDUSTRY

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After an extensive mass X-ray survey of industrial workers in Durban in 1952,[1] it was noticed that there was a high prevalence of pulmonary tuberculosis amongst workers in the clothing industry. As a result of this finding, which was not unexpected in view of previous reports,[2] it was decided to make a thorough study of this section of industry. A survey was carried out in the latter part of 1953 during which more than 99% of 7,510 clothing workers in Durban were X-rayed on mass miniature film (70 mm.) with a follow-up of clinical investigation and 10″×15″ X-ray of cases discovered.

METHOD AND PROCEDURE

The object of this survey was to try, as far as possible, to X-ray all persons employed in the clothing industry within the Durban municipal area. The investigation was arranged through the representatives of the Industrial Council for the Clothing Industry, who acted as a direct liaison between the mass X-ray unit and the employer. The unit visited each factory in turn, and with the aid of complete factory employment lists all employees were checked as the X-raying took place. Particulars regarding name, sex, race, age and specific occupation were written on special numbered X-ray cards. An output of 100 radiographs per hour was maintained throughout the survey and this entailed little loss of working time for the individual employees.

All films showing doubtful or suspicious lesions were noted and the individuals concerned were referred to the Durban Chest Clinic for further investigation. When the diagnosis had been established the case was referred to the local hospital or treated as an out-patient. All significant cases of tuberculosis were therefore placed under adequate medical supervision.

At the completion of the survey those who were absent at the time when the unit visited the factories were 'rounded-up' and X-rayed. In this manner a coverage of 99·28% was obtained.

RESULTS AND OBSERVATIONS

There are 72 clothing factories within the Durban municipal area, employing 7,510 individuals. Of this total 7,272 were X-rayed at the first attempt, leaving a 'residue' of 238 absentees. A subsequent visit resulted in a further 184 people being X-rayed. Fifty-four individuals (0·7% of the labour force) were therefore not X-rayed, and this group represented in the main those workers who had changed their occupation, had been dismissed or had left Durban.

Of the 7,456 persons X-rayed 414 were Europeans (5·5%), 1,665 Coloured (22·3%), 4,206 Asiatics (56·4%) and 1,171 Natives (15·7%). The race groups employed are therefore predominantly non-Europeans (94·5%).

Table I shows the distribution of the 7,456 workers

TABLE I. DISTRIBUTION OF WORKERS IN THE DURBAN CLOTHING INDUSTRY, BY RACE AND SEX (1953-54)

Number of Workers X-rayed: Age-group (years)	European		Coloured		Asiatic		Native		Eur.	Col.	As.	Nat.	M	F	Total
	M	F	M	F	M	F	M	F							
15-19	10	24	11	527	791	259	142	95	34	538	1,050	237	954	905	1,859
20-24	24	44	1	406	1,163	248	209	204	68	407	1,411	413	1,397	902	2,299
25-29	16	31	8	287	640	106	138	115	47	295	746	253	802	539	1,341
30-39	55	64	13	333	580	105	108	91	119	346	685	199	756	593	1,349
40-49	53	59	9	50	244	33	44	7	112	59	277	51	350	149	499
50-59	16	12		14	29	2	13	1	28	14	31	14	58	29	87
60+	5	1	2	4	6		4		6	6	6	4	17	5	22
Total	179	235	44	1,621	3,453	753	658	513	414	1,665	4,206	1,171	4,334	3,122	7,456
Number not X-rayed	3	6	1	8	19	6	4	7	9	9	25	11	27	27	54
Total number of employees	182	241	45	1,629	3,472	759	662	520	423	1,674	4,231	1,182	4,361	3,149	7,510
% X-rayed	98·35	97·51	97·77	99·44	99·45	99·20	97·86	98·65	97·87	99·46	99·40	99·15	99·38	99·14	99·28

TABLE II. PREVALENCE OF PULMONARY TUBERCULOSIS IN 7,456 CLOTHING WORKERS

(*Active* cases in 'bold' type, *all* cases in normal type)

Age-group (years)	Number of Cases: European		Coloured		Asiatic		Native		Total	Percentage: European		Coloured		Asiatic		Native		Total
	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F	
15-19				**4**	**3**	**2**	**1**		**10**				**0·76**	**0·38**	**0·77**	**0·70**		**0·548**
				6	7	2	1		16				1·14	0·88	0·77	0·70		0·861
20-24	**1**			**7**	**17**	**1**	**1**	**5**	**32**	**4·17**			**1·72**	**1·46**	**0·40**	**0·48**	**2·45**	**1·392**
	1			10	29	4	4	6	54	4·17			2·46	2·49	1·61	1·91	2·94	2·349
25-29				**3**	**8**	**3**	**5**	**3**	**22**				**1·05**	**1·25**	**2·83**	**3·62**	**2·61**	**1·641**
				8	29	4	6	5	52				2·79	4·53	3·77	4·35	4·35	3·878
30-39	**1**			**6**	**6**	**3**	**5**	**2**	**23**	**1·82**			**1·81**	**1·03**	**2·86**	**4·63**	**2·20**	**1·705**
	1	1		10	27	6	6	2	53	1·82	1·56		3·00	4·66	5·71	5·56	2·20	3·929
40-49			**1**	**1**	**6**		**2**		**10**			**11·1**	**2·00**	**2·46**		**4·55**		**2·004**
	1	1	1	4	10		2		19	1·89	1·69	11·1	8·00	4·10		4·55		3·808
50-59	**1**								**1**	**6·25**								**1·149**
	3				1				4	18·7				3·45				4·598
60+					**1**		**1**		**2**					**16·7**		**25·00**		**9·091**
					1		1		2					16·7		25·00		9·091
Totals	**3**		**1**	**21**	**41**	**9**	**15**	**10**	**100**	**1·67**		**2·27**	**1·29**	**1·19**	**1·20**	**2·28**	**1·95**	**1·341**
	6	2	1	38	104	16	20	13	200	3·35	0·85	2·27	2·34	3·01	2·12	3·04	2·53	2·682

X-rayed by age, sex and race. Most non-European workers are under the age of 30 and only a small proportion appear to be engaged in this type of work after that age. This proportion is reversed in the Europeans, among whom the majority are found in the older age-groups. In his survey on employment in the South African Clothing Industry, Routh [3] found a similar distribution in workers in the Transvaal, where the average age of White employees was considerably higher than that of the non-Europeans.

It is noted that the males predominate, and that the majority of these male workers are Asiatics while the Coloureds form the largest group of female employees.

The prevalence of active and apparently healed pulmonary tuberculosis is shown in Table II and the radiological extent of these lesions in Table III. The

TABLE III. DISTRIBUTION AND EXTENT OF PULMONARY TUBERCULOSIS LESIONS

Extent of Lesion	European	Coloured	Asiatic	Native	Total
Minimal	4	25	88	22	139
Moderately Advanced	4	8	22	6	40
Extensive		6	10	5	21
Total	8	39	120	33	200

definitions used in these tables conform to the standard laid down by the National Tuberculosis Association.[4]

In analysing these results a 'null hypothesis' is set up, that there is no difference in liability to the disease among the various groups. If this is so we take the average over-all percentage as an estimate of the liability. Since 100 cases of active tuberculosis were found in 7,456 cases examined this proportion is $100/7{,}456 = 1{\cdot}341\%$.

It was further assumed that the figure would follow a Poisson distribution,[5] and each individual figure was tested against the standard figure of 1·341%.

Example: Of 108 Native males in the 30-39 age-groups, 5 were found to have active tuberculosis. (This is 4·63%). Tables of Poisson distribution [5] give for a parameter of 1·4 a probability of ·014253 of a value of 5 or more occurring, and for a parameter of 1·5, a probability of ·018576. Rough interpolation gives a probability of about ·016 or 1·6%, which is 'significant at the 5% level'. This means that our null hypothesis is probably not true, and that the high number of tuberculosis cases in this group is probably due to a greater liability to the disease among members of this group.

Every group was tested in this way, as were many combinations of groups. The groups shown in Table IV

TABLE IV. ACTIVE CASES OF TUBERCULOSIS

	Number in Group	Number of Cases	% of Cases	Probability and Significance	
Asiatic Males (15-19)	791	**3**	0·38	·007	† (Low)
Native Males (25-29)	138	5	3·62	·04	* (High)
Native Males (30-39)	108	5	4·63	·016	* (High)
European Females	235	0	0	·043	* (Low)
Native Males	658	15	2·28	·035	* (High)
Natives, both sexes	1,171	25	2·135	·018	* (High)
All Races, both sexes (15-19)	1,859	10	0·548	·0002	‡ (Low)
All Races, both sexes (60-69)	22	2	9·091	·036	* (High)

* Denotes significance at 5% level (just significant)
† Denotes significance at 1% level
‡ Denotes significance at 0·1% level (very significant)

TABLE V. ALL FORMS OF TUBERCULOSIS

	Number in Group	Number of Cases	% of Cases	Probability and Significance	
Asiatic Males (15-19)	791	7	0·88	0·0004	‡ (Low)
Asiatic Females (15-19)	259	2	0·77	0·3	† (Low)
Asiatic Males (25-29)	640	29	4·53	0·006	† (High)
Asiatic Males (30-39)	580	27	4·66	0·005	† (High)
Coloured Females (40-49)	50	4	8·00	0·048	* (High)
European Males (50-59)	16	3	18·7	0·009	† (High)
European Females	235	2	0·85	0·05	† (Low)
All Races, both sexes (15-19)	1,859	16	0·861	$<10^{-6}$	† (Low)
All Races, both sexes (25-29)	1,341	52	3·878	0·007	† (High)
All Races, both sexes (30-39)	1,349	53	3·929	0·005	† (High)

Average rate of incidence = 200/7,456 = 2·682%

(*active* cases only) gave significant variations from the normal. The results of a similar analysis of the distribution of *all forms* of tuberculosis in the workers are shown in Table V.

It was suggested that the size of the factory might have an effect on the incidence of tuberculosis. The factories were therefore grouped into 4 classes according to the number employed, as indicated in Table VI.

TABLE VI

Size of Factory	Number of Factories	Total X-rayed	% Tuberculosis Active	% Tuberculosis All Cases
50-100	15	1,011	1·48	2·77
101-200	15	2,041	1·08	2·20
201-300	4	975	1·23	2·66
Over 300	5	2,528	1·34	2·49

There was found to be *no significant difference* between the percentages for these 4 groups. This will be referred to again under 'Discussion'.

It is emphasized that the above figures should not be taken uncritically, but the following conjectures are supported by them.

(1) Active tuberculosis is more prevalent among Natives than other racial groups. The percentage of all cases (2·818) is also higher than the average rate (2·682), but the difference is not statistically significant, having a probability value of 0·38.

(2) The prevalence increases with age. There are significantly low values in the 15-19 age-groups, and significantly high values for the older groups. This is also supported by a steady increase in percentage with age in active cases, and a somewhat similar trend for all cases (Table VII).

(3) Pulmonary tuberculosis may be more prevalent in males than in females.

Note: The above figures apply *only* to workers in the Durban Clothing Industry, and these workers are certainly *not* a random sample of the population of Durban. Our conclusions, therefore, should not be considered as applying to the whole population of Durban and *a fortiori* do not apply to any larger population. They are chiefly of value for comparison with similar figures from other industries, or the same industry in a different location or at a different time.

COVERAGE

In the original survey, out of 7,510 workers, all but 238 were X-rayed. If a considerable number of these

TABLE VII

Age	15-19	20-24	25-29	30-39	40-49	50 *and over*
Active	0·548%	1·392%	1·641%	1·705%	2·004%	2·751%
All Cases	0·861%	2·349%	3·878%	3·929%	3·808%	5·505%

had been absent *because* they had tuberculosis, the results could have been completely misleading, since 238/7,510 is 3·17%, and only 2·682% of cases were found. However, 184 of these absentees were subsequently X-rayed, and, except in the case of European males, there was no reason to suspect that this was the case. The 54 persons not X-rayed, whom it was not possible to trace, were almost certainly a random sample from the whole group, and it is therefore almost certain that their inclusion would not have affected the results.

DISCUSSION

South African industry has grown enormously since 1939. This has been markedly so in the case of the clothing industry. According to Routh the working force of this industry increased by 152% between 1935 and 1952.[3] A feature of this increase has been the steady replacement of White by non-White labour at most of the bench jobs. In 1938 Whites constituted 61·2% of the workers in the clothing industry, whereas in 1952 though their total numbers had increased they supplied only 29·4% of the workers in this industry in South Africa. In Durban this drop was from 20·4% with 373 employed in 1938 to 5·5% with 423 employed in 1953.[6]

The population of this industry in Durban consists of all 4 races living in South Africa, i.e. White, Asiatic, Coloured and Native. The Whites constitute the smallest portion of the group, and are employed mainly as directors, secretaries, engineers, clerks and typists, with only an occasional machine operator. The Asiatic and Coloured group operate predominantly as machinists, and occasionally as directors and clerks. In the Native group the females are employed as machinists, and the males work as cleaners, packers and delivery hands.

Clothing workers in Durban work 42½ hours over a 5 day week, and any overtime is paid for at the rate of 'time and a half'. Their benefits include an annual 3 weeks' holiday and they may receive sick-pay for a period of 8 weeks during the year. They enjoy a free medical service which includes medicines.[6]

In the clothing industry we do not know of any substance in the atmosphere which is injurious to the lungs, thereby making clothing workers more susceptible to tuberculosis. Infection, however, is likely to spread more easily from the acute and chronic cases, owing to the fact that the workers are in close and continuous contact with one another throughout the working day.

Our material shows a significantly higher prevalence of active pulmonary tuberculosis amongst the Native than in the White, Asiatic and Coloured populations. In the Native, whose general resistance in Natal at present would appear to be lower than that of the other 3 racial groups surveyed, active pulmonary tuberculosis is not an unexpected finding in view of the relatively higher incidence of the disease locally. Higher mortality rates are also reported in this racial group,[7] where the socio-economic factors are weighed against them and their cultural and dietary habits are not yet suited to urbanization.

There is a definite increase of tuberculosis with age, which is seen in Table VII, where the probabilities of the material have been significant. This appears to compare with previous reports.[2] The prevalence of tuberculosis amongst the males of the whole group is higher than for the females. The difference is significant at the 5% level (using the standard error of a proportion) for *all cases*, but is *not* significant for active cases only. There appears to be two possible causes for this difference: (*a*) there is a larger proportion of males in the higher age-groups, and (*b*) of the cases found, 22·8% of the males and 10·1% of the females were previously-known diagnosed cases (Table VIII). With

TABLE VIII. PULMONARY TUBERCULOSIS CASES 'KNOWN' BEFORE SURVEY

	European	*Coloured*	*Asiatic*	*Native*	*Total*
Male	—	—	29	1	30
Female	—	6	—	1	7
Total	—	6	29	2	37

regard to (*a*) it can be shown that the effect is so slight as to be negligible. In case (*b*) the high percentage of known male cases is probably explained by the facts that (1) the clothing industry is a comparatively light and suitable occupation for treated tuberculosis cases and chronic cases, and (2) the males are in the main the primary breadwinners, and therefore return to work more often, and many who are diagnosed refuse to be hospitalized or stop work. The female, who usually supplements the home earnings, can afford to report sick early and stop working more easily. Thus *the higher percentage of cases known before the survey* may account for the higher prevalence of pulmonary tuberculosis in males.

Stewart and Hughes,[8, 9] reporting on their survey of the Boot and Shoe Industry, have observed that acute undiagnosed cases usually occurred in association with chronic cases (previously notified or undiagnosed cases) and that the proportion of acute to chronic disease steadily increased with the increase of factory size. They show that pulmonary tuberculosis in boot and shoe factories employing more than 600 workers was 3 times as great as in factories with fewer than 100 operatives, and factories of intermediate size show a steady gradation between these two. They noticed this in the clothing industry as well.

When we investigated the prevalence of pulmonary tuberculosis in groups of factories of varying size (Table VI), it was found that there was no significant difference as reported by Stewart and Hughes; our findings would indicate that factory size was not as important as grouping of workers, i.e. the amount of floor space allowed for each worker. This, to our way of thinking, is a more reasonable explanation of the high prevalence in all factories, both small and large, where the factory laws provide a minimum of 25 sq. ft. per person. In the clothing factories surveyed it would appear that the larger the factory, the more floor space was allowed per worker, whereas the smaller factories allowed the minimum of floor space. It may be that the more crowded conditions of the small factories

compensated for the small working unit, and the larger floor space compensated for the larger working units; so that factory size is not shown to be a controlling factor here as in the Boot and Shoe Industry. The density of our workers, as mentioned above, decreases as the factory gets larger, contrary to what was shown in the Boot and Shoe Industry.

In our survey we have not noticed any difference in the prevalence of pulmonary tuberculosis in the more modern factories, as compared with the older factories where the machinists are placed face-to-face. The modern factories have their workers working one behind the other with the goods moving down the lines from the back forward, and one is tempted to think that these methods are preferable.

The prevalence of pulmonary tuberculosis is higher in this industry than has been found in industry as a whole in Durban,[1] and this might possibly be due to the continuous close contact resulting from the working conditions of this industry, which favours the spread of any infectious disease.

As previously stated, it is considered by most workers to be a suitable employment for ex-tuberculosis patients. The majority of the workers are non-Whites, who are not always particular whether they have treatment or not, as long as they can hold a job and earn a living. In other industries the workers are rarely grouped so closely together throughout the working day, and tuberculous cases deteriorate more rapidly and so have to stop working sooner, with the result that they possibly infect fewer of their fellow workers.

Stage of Disease. The extent of pulmonary involvement shows that 69·5% of the cases were minimal, 20% moderately advanced and 10·5% far advanced (Table III). It is interesting to note that the extent of the disease present in the various races does not show any significant differences. It is also to be noted that the group of 184 workers caught up in the second attempt did not make any difference to the original results, and could not therefore be considered as a group who defaulted purposely.

CONCLUSIONS

This 99·28% mass X-ray survey of the workers in the clothing industry has shown that with the co-operation of the Industrial Council and the management of the industry a complete survey is possible in Durban.

The prevalence of pulmonary tuberculosis is high in the clothing industry at present compared with other industries in Durban.

Active pulmonary tuberculosis is more prevalent amongst the Natives than other races.

There is a definite increase of pulmonary tuberculosis with age.

Pulmonary tuberculosis may be more prevalent in males than in females.

There appears to be no relation between the size of a factory and the prevalence of pulmonary tuberculosis.

SUMMARY

A survey of the clothing industry in Durban is described in which 7,456 workers were X-rayed out of a total group of 7,510 (99·28% coverage).

The material consisted of workers in 4 different races, all age-groups and both sexes.

The material is presented in charts and tables, with conclusions drawn from the statistically significant data.

We wish to express our thanks to Mr. B. Brinton and Mr. S. H. Curtis of the Clothing Industry for their great efforts in organizing this survey. We should also like to thank Mr. E. A. Pillinger and Mr. J. H. Fleming for their invaluable assistance, Dr. B. A. Dormer for his advice, and the Secretary for Health for permission to publish this report.

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ONGEWONE GEVAL VAN PYN IN DIE REGTER *ILIAC FOSSA*

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Dit is welbekend dat daar verskillende oorsake van pyn in die regter *iliac fossa* is en dit kan nooit met sekerheid vooruit gesê word wat die bevindings sal wees by die operasie vir die pyn in die buik in daardie geweste nie.

Hierdie geval was opgeneem met 'n diagnose van akute blindedermontsteking, maar by operasie het dit geblyk 'n ongewone oorsaak van die pyn te wees en in die literatuur kon geen ander soortgelyke geval opgespoor word nie. Hierdie ongewone bevindings kan in gedagte gehou word as 'n oorsaak van pyn in die regter *iliac fossa*, maar daar is geen metode waarby die diagnose voor die operasie vasgestel kan word nie.

RAPPORT VAN GEVAL

'n Skooldogter van 13 jaar was toegelaat tot die hospitaal met die klagte van maagpyn, opbring en frekwensie van

urinering. Die aanval het dieselfde dag begin terwyl sy op skool was en dit was so erg dat sy moes gaan lê. Die pyn het in die regter *iliac fossa* begin en het net daar gebly. Sy het eenmaal opgebring, maar dit het geen verskil aan die pyn gemaak nie. Haar ontlasting was normaal, eenmaal per dag. Menstruasie het nog nie begin nie.

By Ondersoek. Sy was normaal in bou en voorkoms, maar het koorsig daar uitgesien en haar tong was nie skoon nie. Haar temperatuur was 99° F en die pols 88 per minuut. Hart en longe was normaal. In haar buik kon 'n mens spanning in die regter *iliac fossa* opmerk en sy was teer daar. Die res van die buik het niks abnormaals getoon nie. Later het hierdie tekens erger geword en klinies is die diagnose van akute blindedermontsteking gemaak en is daar besluit om te opereer.

Operasie. Die operasie was nog dieselfde dag gedoen. 'n Snit was gemaak onderkant die nael net regs van die middellyn. In die peritoneum was geen vrye vog nie. Die blindederm was lank en dun en het heeltemal normaal gelyk. Dit was verwyder aangesien dit vry was en maklik om te verwyder. Histologiese ondersoek later het dit bevestig dat die blindederm normaal was.

Die blindederm was dus nie die oorsaak van die akute tekens en simptome nie en gevolglik was verder gesoek. 'n Klein pers knoppie was gevind aan die onderkant van die mesosalpinx naby die vry kant en naby die fimbria van die regter buis.

By nader ondersoek het dit geblyk dat hierdie knoppie bestaan het uit 3 kiste van Morgagni. Elk van hierdie was so groot as 'n ertjie en elk het 'n stingel van omtrent 'n halfduim lank gehad (sien Fig. 1). Hierdie 3 stingels was vasgewikkel in 'n ware knoop en dit het as gevolg gehad die vasknelling van die 3 kiste. Dit was moeilik om hierdie knoop te ontrafel. Die kiste met hulle stingels was gevolglik verwyder en geen

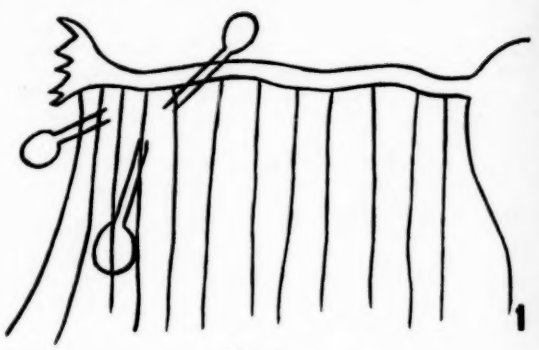

Fig. 1

ander abnormaliteit was in die buik gevind nie. Die wond is toe toegemaak. Die pasiënt het gou herstel en was 12 dae daarna ontslaan. Daarna was daar geen herhaling van haar simptome nie en tot nou nog toe is sy gesond.

Daar was geen twyfel nie dat hierdie knoop wat gevorm het en die gevolglike vasknelling van die kiste die oorsaak van die pyn in die regter *iliac fossa* was en dat dit so opvallend gelyk het na 'n akute blindedermontsteking.

SUMMARY

A case of strangulation of cysts of Morgagni in a young girl is reported, resulting in signs and symptoms resembling those of acute appendicitis.

My dank is ek verskuldig aan Mnr. S. W. Holmes, F.R.C.S., Chirurg van die Mile End-hospitaal, vir toestemming om hierdie geval te publiseer.

ASSOCIATION NEWS : VERENIGINGSNUUS

IMPRESSIONS OF POSTGRADUATE GENERAL PRACTITIONER COURSES IN LONDON AND NEW YORK IN 1954

JULIUS H. KRETZMAR, M.B., CH.B. (EDIN.)

Kimberley

The second world war and 6 years of active service in the war must have played havoc with the postgraduate aspirations and ambitions of thousands of doctors the world over. The return from service to civilian medical practice at the end of 1945 meant for many a complete re-orientation and the start of a long struggle for rehabilitation, re-establishment and progress. In different categories it took different forms. In Kimberley we were particularly fortunate in the establishment of the Kimberley Medical Practitioners' Pool —a unique experiment which safeguarded the practices of the men away on active service, and which we must not be in a hurry to forget.

With the passing of the years, the need for a general refresher course in general practice became urgently felt. The idea of studying for a further degree (with or without ideas of the specialist register) was dismissed owing to professional and domestic exigencies, and the final decision was a refresher course extending over not more than 3 months.

Dr. James Black[1] in his report on postgraduate training in Great Britton dealt mainly with the graduate intending to specialize. The present question is, 'What is the general practitioner of about 20 years' standing to do with regard to postgraduate refresher work?' Apart from a course held immediately after the war for returned ex-servicemen, and the one week's course run by the University of Cape Town in January 1955 and now pending in June/July 1955, there has been no other organized G.P. refresher work.

While all this was under consideration there appeared a letter in the *Journal* of 16 May 1953 from Dr. D. Dodds,[2] a Cape Town graduate at Chicago, advising South African practitioners of the facilities available in the U.S.A. and offering to obtain information for inquirers.

I immediately wrote to Dr. Dodds and in reply he kindly referred me to postgraduate courses at New York (Polyclinic, Medical School and Hospital), Chicago (Cook County Graduate School of Medicine) and Boston (Harvard Medical School). He also mentioned the GP refresher courses held in England, and

said it might be worth my while to 'kill two birds with one stone'. It was cheaper to go to USA, via UK, the cheapest one-way fare *via* Union Castle and Cunard being £120. Dr. Dodds suggested a rotating internship (2 months each in medicine, surgery, gynaecology, etc.) such as graduates in USA commonly do. The courses are somewhat expensive but by living frugally one could get along on £50–60 per month.

I received my American visa in July 1954 and was away on a 3 months' trip to do a refresher course in general practice in London and New York. And here I wish to pay tribute and express my appreciation to the British Postgraduate Medical Federation and its Director Sir Francis Fraser in London; and to thank Dr. Dodds for his letter to the *Journal* and to me with his advice.

LONDON

Through the Federation my courses for the month of September were arranged in 3 hospitals in London—the West London, the Prince of Wales (Tottenham) and the Lewisham; and when I arrived in London the office staff of the Federation knew all about me and in two twos I was organized with the courses and all necessary details. They could'nt do enough!

Accommodation. 'London House' in Guilford street off Russell Square is a wonderful establishment for Commonwealth students and postgraduates. Men from South Africa, Australia, New Zealand, Canada, UK, and other parts of the Commonwealth, are cheaply, comfortably and kindly housed in an excellently run hostel. The atmosphere there is one of friendliness, but the theme is one of seriousness; men are there for a purpose and their study lasts deep into the night.

At the West London there was no set course of lectures or clinics, but I attended and sat in with the chiefs in the out-patient departments according to the weekly time table. In this way in 2 weeks a great variety of cases was seen at close quarters, discussions held over them with the chiefs and much fresh light shed on the bread-and-butter traffic in a general-practice consulting room. An impression gained here and in the other two hospitals was that in South Africa we have a better supply than our colleagues in London of American antibiotics and other drugs. Even in Kimberley we had been using US material for many months which there, in September 1954 had been released for general use for a short time only. British GPs attending these courses said some of the antibiotics were still not available in their practices.

Surgery I had excluded from my list of subjects; I did not wish to spend hours in theatres watching operations. For a general practitioner I favour the walking of out-patient departments and sitting-in on the different clinics, including the specialities; and in the short time at the West London, much material was seen and fresh thought stimulated. Ward rounds were also attended and bedside demonstrations given on cases such as one would meet in practice. It was vacation time and there were not many students around, and so one got to close quarters with both patients and chiefs. Unfortunately some of the bigger chiefs were away on holiday, but some of the younger staff were very keen to oblige with material and discussions and teaching.

The one week's course at the Prince of Wales Hospital was my first organized course for GPs; nearly 30 men from all parts of England attended, and two or three South Africans. Lectures and ward rounds were given, and excellent X-ray films of the chest and digestive tract demonstrated. The visits to an infectious diseases hospital were very instructive.

Talking to GPs about their reaction to the National Health Schemes one could not help noticing in some a willingness to pass their cases on to hospitals and consultants at the slightest sign of worry or doubt, the idea being, 'Why should I worry?' The NHS seemed to me to have bred a spirit of that kind among some of the men I spoke to. They all appeared—particularly the younger men, and mostly ex-servicemen—to be satisfied with the organization of the scheme because the NHS solved their post-war rehabilitation problem and they had no worries about practices. Older men were worried because the NHS had meant a loss in income. They all were apparently very hard worked; many had not had an annual holiday for years and not a few came on these courses as a way of getting leave for a week or two from their practices—the NHS supplying the locums.

The week at Lewisham was devoted to obstetrics and gynaecology and here things were very well organized under Dr. Alistair Gunn. Daily lectures were organized and demonstrations in the labour ward and in the wards; and if an interesting case came in or came off while the course was at lecture we would adjourn to the labour ward. The relevant type of case often came in as the subject was under discussion, e.g. breech presentation, retained placenta, toxaemia of pregnancy etc. When I mentioned that I was from South Africa, where one saw many strange cases among the Bantu, Dr. Gunn became even more friendly because he had been at the McCord Mission Hospital in Zululand. He was most helpful in every way. Antenatal clinics were attended and cases reviewed.

An interesting impression is that the midwife is taking over generally the midwifery practice in England. GPs were very surprised to hear of the number of confinements, forceps cases and Caesarians we GPs do here. In England the midwife does most confinements and rarely calls in the GP—and then the case goes to the hospital. It is all in the service, but GPs are doing less and less midwifery. People are encouraged to have their babies at home and to be confined by midwives—only difficult and or complicated cases coming to hospital. It would seem to be working well.

Between-times a Wednesday-afternoon 'Circus' was attended at Great Ormond Street Hospital for Sick Children. Here some of the house staff present interesting cases, and general discussions are held, each case lasting 20 minutes. It was stimulating to see the devotion and intensity and limitless bounds of the treatment given to some of the little children presented.

Guy's Hospital with its historic museums and libraries was shown me and a ward round made with a senior neurologist. Interesting cases were seen, but I would not recommend this type of ward round—with the big chief, registrar, house surgeon, and students—for the GP who is after bread-and-butter cases. Fresh cases studied *de novo*, yes, but not reviewing cases which have been lying in the ward for weeks.

London is different because of distances between residence and hospitals. Tubes are the fastest mode of travel and as it took never less than an hour to get to any of the 3 hospitals there was not the time to walk the hospitals. But in the 4 weeks some of the old days of student activity had begun to pervade the atmosphere, auguring well for the USA portion of the trip.

Before leaving England a few words about general impressions. The most important and striking was the charming courtesy, kindness and friendliness of the people. Everyone seemed to have drunk deep of the milk of human kindness and it was truly a land of milk and honey. This is the abiding impression of this visit to London—England—in vivid contrast to the brusque rudeness of the man in the street in New York. Another feature was the orderliness and patience of the queues. There still are queues but it has become part of life and no one grouses or moans. Dr. Vaughan-Jones and I were fortunate enough to get to see the Air Pageant at Farnborough. It was a sunny Sunday and 250,000 people attended; when the show was over it was a treat to see the traffic people shepherd this huge crowd in queues to buses and trains without any fuss or palaver; and in no time one was on the way back to London. Farnborough—the huge jet aircraft—breaking the sound barrier—the new Comets—it was an experience to see and hear it all. A final highlight was the spending of a delightful weekend with an old war-time colleague, Dr. C. A. H. Watts, and Mrs. Watts, in Ibstock, Leicestershire. The charm of their hospitality, the beauty of the English countryside, and the glory of the threatre at Stratford-on-Avon, where we saw Shakespeare's 'Taming of the Shrew', were fitting memories to take from the old world to the new.

Travel. For the GP who has to save time to cover as much as possible, the ideal time-saving mode of travel is by air. By SAA to London, London to New York by BOAC (*via* Rekjavik in Iceland), and return from New York to Johannesburg by PAA *via* Azores and Lisbon down the West Coast of Africa.

NEW YORK

The most fantastic and fabulous city in the world. It has to be seen to be believed.

A 4 weeks' course is laid on for the months April and October every year, for general practitioners. In correspondence with the Polyclinic—the New York Polyclinic Medical School and Hospital—different hotels were recommended conveniently close by on 8th Avenue and 51st Street. The Hotel Capitol is about 200 yards away from the hospital. This was a great convenience after London's long treks by tube and bus.

Without much concentration on surgery (because concurrently a surgery course was being run where men worked on cadavers)

pretty well every branch was covered by the time the course was over. Lectures, discussions, ward rounds, out-patients, films, slides, went on from 9 a.m. to 5.30 p.m. every day including Saturdays, with ½ hour break for lunch most days. Lunch could be had either at the hospital or in restaurants near by.

Impressions are too many and too kaleidoscopic for orderly presentation; so I will give you impressions at random. The cosmopolitan staff set-up, of resident staff, interns, chiefs, registrars and nursing staff, was a miniature United Nations—Turkish, Iranian, Canadian, Syrian, American, Spanish, Philippine, Chinese. Traffic in out-patient clinics was terriffic—the different clinics on different floors at different times. A feature of the lectures and rounds is asking questions of the professor and even debating with him.

Having settled for the New York 'Polyclinic' I abandoned the prospect of a visit to the Mayo Clinic. New York, the great metropolis, with all its fascinating and stimulating interests apart from the purely medical sphere, remained the territory for GP refresher work. At this GP course there was an average of 7 GPs coming from as far afield as the Western and Southern states of America, South America, Philippines, South Africa. Time does not permit of a complete picture of the work there, but I will try to cover as wide and multifaceted a field as possible.

The first impact of the free and easy spirit of the lecturers—gumchewing and cigar smoking—was one of surprize, but one quickly became adjusted to the American way of life. I want also to mention the great kindness and helpfulness of most of the lecturing staff and particularly the Dean, Dr. Barrows, chief of the Gynecology section (and his office staff).

General Impressions of Course

Gynaecology. An impression carried away was the intensive preoccuption with 'cancer-in-situ'. Great stress was laid on the almost routine examination of every cervix in order to detect the early case and institute early treatment. Sponge biopsy frequently used. Great stress was laid on the use of the Hodge pessary for retroversion in opposition to ventral suspension operations, which were practically never done.

Interesting studies of X-ray hysterosalpingography films for the investigation of sterility were held on numerous sessions. The instillation of lipiodol is employed in New York by gynaecologists as an 'office' prodecure. In the course patients were available for examination.

Dermatology. In this most interesting department there were masses of clinical material at every out-patient session. The guiding genius was Dr. Andrew Montgomery, who was an inspiration to all—an intensive man of over 80, as bright as a cricket, with an immense store of clinical knowledge which he was ever ready to impart. A valuable course for the GP.

Cardiology. Close liaison was kept between lectures and cases in the out-patient clinic; e.g. immediately after a most illuminating lecture on digitalis therapy patients with cardiac diagnosis indicating digitalis were exhibited for examination. An average of 10 to 12 ECGs were done every day and interpreted at the afternoon session. Private physicians brought ECGs to the clinic for interpretation. The first night of the course a most interesting clinical evening was held; Dr. Dwight Emary Harken of Boston gave an address on mitral insufficiency. He demonstrated with a colour film his operation in which a plastic 'baffle' is sewn into the mitral valve, and showed two patients upon whom he had operated on these lines in February 1954, and restored to active life after years of invalidism in bed. A most stimulating evening.

The use of the *Gastroscope* to visualize a gastric ulcer was a demonstration greatly appreciated. A gastric ulcer on the lesser curvature beautifully demonstrated.

The most outstanding teacher was Dr. Paul W. Lapidus, who brought up the rear on Saturday afternoons at 3.30 p.m. in the field of *Orthopaedics*, so fascinating was his style of teaching, so interesting his cases and so stimulating his ideas. He would bring patients from his practice in the city, and had their case histories, X-rays, details of treatment etc., all beautifully arranged. He enunciated his credo of the 4 R's in orthopaedics—recognition, reduction, retention and restitution of function. A vote of gratitude to Dr. Lapidus was passed by the GP course because he restricted his material to the 'bread-and-butter' of GP work.

In the *laboratories* the Asheim-Zondek tests were demonstrated, with the positive reaction on the tissues from the pregnant urine. Many other procedures were shown including receipt of a biopsy specimen (e.g. breast tumour and mixed paroted tumour) from the theatre and the making of a frozen section with diagnosis returned to the theatre in less than 7 minutes.

Rheumatology was given a good deal of prominence in the course. The latest views on cortisone and butazolidine were outlined, and the necessity for careful and regular attention to the blood picture stressed.

The *Ear, Nose and Throat* conditions commonly met with in general practice were very succinctly elaborated in lectures and reviewed amongst the patients seen in the clinic sessions.

In *Chest Diseases* the value of isoniazid was stressed and the closing of sanatoria in the US remarked upon, because of the lower incidence of tuberculosis. An interesting symposium of chest diseases was held in the Queens district sponsored by a voluntary health association.

Other Experiences

At the New York Academy of Medicine, I had the stimulating experience of hearing an address by Professor Wangensteen— a name surely immortal!—in a Symposium on Cancer. In his address he said that he believed in telling the patient when cancer had been diagnosed.

The refreshments after clinical meetings in some hospitals were an eye opener.

What about the New York general practitioner? I had the privilege of seeing the consulting rooms of a few and there were very interesting features. In every 'Office' I found as a routine feature the following: ECG machine, BMR outfit, X-ray plant and dark-room attachment, laboratory equipment for bloods and urines etc., and in some physiotherapy equipment. Large stocks of injection material are carried and treatment given immediately. Many of the GPs indicated that they were not doing midwifery and thus had freer nights. The rooms were usually attached to the doctor's home, which was on the floor above. The consulting hours were usually from 12 noon onwards to meet the needs of people working and coming off in the lunch hour. Evening surgeries sometimes went on to 9 p.m. Fees were high. The receptionists were also usually well trained by the GPs and they were usually the technicians handling the abovementioned equipment.

A very pleasant feature was the reunion with a group of New York practitioners who had been one's contemporaries in Edinburgh in undergraduate days. Their hospitality and kindness knew no bounds and their help in furthering the object of my visit was of great value. The readiness and willingness in colleagues in New York to help me with my postgraduate studies I profoundly appreciated.

Although the pace of life in New York to a South African with a love for the open veld and our moderate tempo is at the start pretty hectic, one finds after a short while there that one's own pace is subtly speeded up, and one slips into the way of life there. It is certainly a stimulating experience and I deem it a happy privilege that I was able to spend 2 months in New York, doing intensive general-practitioner postgraduate work and able in the free moments to observe the tremendously vital urge of the pulsation of the heart of New York with its hurrying millions. It is an experience that has in many ways already reflected its benefits in diverse ways on return to practice and it is well worth considering by anyone who is contemplating a visit to England and the Continent of Europe. Once there, New York is only an overnight's flight from London, and the New World will be waiting, scintillating in its millions of lights below.

My gratitude and appreciation to all those who helped me in the organization of these courses in London and New York.

Dr. Kretzmar's address was delivered at the April meeting of the Griqualand West Branch of the Medical Association of South Africa held at Kimberley Hospital on 29 April 1955. Dr. D. E. Stephens was in the Chair and 20 members attended. Before delivering his address Dr. Kretzmar exibited an interesting collection of maps, guide books, programmes and prospectuses from London & New York, and many members availed themselves of the opportunity of paging through them.

REFERENCES

1. Black, J. (1953): S. Afr. Med. J., **27**, 607.
2. Dodds, D. (1953): *Ibid.*, **27**, 440.

REPORT ON ASSOCIATION INTERVIEW WITH MINISTER OF HEALTH ON 17 MARCH 1955

The deputation from the Medical Association led by the Chairman of Federal Council, Dr. A. W. S. Sichel, consisted of Dr. D. J. Serfontein, Chairman of the District Surgeons' Group, and Drs. J. D. Joubert, and G. F. C. Troskie, accompanied by the Associate Secretary, Dr. L. M. Marchand.

The matters presented to the Minister were dealt with seriatim as set out in the memorandum submitted by the Executive Committee of the District Surgeons' Society to the Parliamentary Committee of Federal Council. To this memorandum certain replies had already been received from the Secretary for Health on 24 February 1955. These replies were considered in the discussion of the various items with the Minister.

A. *Salaries.* The Minister reaffirmed the information given by the Secretary for Health that salaries of district surgeons had been considerably increased. In 1930 there were 278 district surgeons receiving £65,800. At present there are 360 posts with salaries totaling £142,000. It would therefore be unfair to increase the salaries paid in 1930 by 25% because a much larger percentage has already been added. The work done by district surgeons as set out in their annual reports was taken as the basis on which salaries were raised. The Minister stated that at the present time there was no prospect of a general increase in the salaries, but that consideration would be given to any representations made by a district surgeon substantiated by statistics, which must be correct as far as possible. He repeated that the Department had never reduced salaries of appointments when new appointments had been partitioned off from them.

B. *Travelling Allowance.* The Minister pointed out that the 1s. per mile was regarded as a reimbursive allowance, and mentioned that taxis made a profit out of that. In most centres there is transport available under contract with the Government of which use can be made instead of the doctor's own car. It has been the policy of the Department to take into account the amount of travelling done and the nature of the roads in assessing a salary so as to cover the time spent in travelling rather than increase, the mileage fee.

C. *Drug Allowance.* In 1930 the Department spent £3,900 on drugs, while the expenditure in 1954 reached £15,400. In cases where the district surgeons are not able to write prescriptions the Department replaces expensive drugs which were used for Government cases. It was only necessary to give the patient's name and qualification with the nature of the disease and to certify that the drugs were issued by the doctor out of his own stock. Some measure of control had to be kept in order to prevent the use of Government drugs in private practice.

D. *Maternity Services.* The Minister was sympathetic to an increase in the fee for maternity services, but made it quite clear that a fee should only be payable when the doctor was actually in attendance at the time of the confinement. The Department is considering an amendment to the fee for maternity services, and the Minister suggested that a further approach should be formally made in this matter by the District Surgeons' Society.

E. *Fees for Autopsies.* The representations made by the members of the deputation appeared to influence the Minister in agreeing to consider some form of remuneration for post-mortems, particularly those done in the country under adverse conditions. It was impossible to lay down a uniform fee for all cases, because many doctors were able to conduct these examinations in proper surroundings, but consideration may be given to representations made by the District Surgeons' Society for a fee in those cases where dissection was actually performed under adverse conditions.

The deputation did not regard a fee as payable when only an examination without dissection was necessary to determine whether death was due to natural causes.

F. *Examinations.* This item was not discussed with the Minister in any detail as he had to terminate the interview for his next appointment.

In general discussion the deputation was given to understand that the Department was going into the question of revising the fees paid for operations as set out in the District Surgeons' agreement. The question arose whether a change in the contract would require re-advertisement of all appointments. It may be advisable for the District Surgeons' Society to obtain a ruling from the Medical Council on this point.

In general the Minister advised the deputation that his Department would always consider representations made by district surgeons, but it was necessary that district surgeons should be advised by circular or other means that they should keep proper records from which they could compile the statistics to substantiate their claims for increased remuneration.

On a suggestion of the Minister and in discussion amongst the members of the deputation after the interview, it was felt that it might serve a useful purpose if a questionnaire was sent to its members by the District Surgeons' Society so that its members could give facts and figures to support any approaches made by the Society to the Department on their behalf. This would concern general principles, but individual district surgeons should still submit such representations as affected their own salaries.

Dr. Serfontein skryf verder na aanleiding van bostaande:

Ek wil graag, as opsteller van die memorandum wat die onderhoud voorafgegaan het, wys op 'n steurende tikfout in die memorandum. Dit geld ons aanvraag vir 'n algemene verhoging van salarisse sinds 1930. Dit moes natuurlik 1950 geheet het. Ek glo egter in elk geval nie dat dit die vaste besluit van die Departement sou gewysig het nie, nl. dat geen algemene salarisverhoging toegestaan kan word nie, en dat aanvrae vir salarisverhoging alleen kan ondersoek word in die geval van individuele distriksgeneeshere wat hulle aanspraak daarop kan staaf met syfers uit hulle rekords van werk.

In die lig van die standpunt van die Departement insake ons griewe wil die Uitvoerende Komitee weer benadruk die belangrikheid en absolute noodsaaklikheid van die hou van betroubare rekords van werk deur alle deeltydse distriksgeneeshere, selfs van werk wat ‚gedek is deur salaris'. Die Departement is, by monde van die Sekretaris van Gesondheid, nie geïnteresseerd in die besondere manier van rekordhou nie, en laat dit aan individuele distriksgeneeshere oor om na hulle beste vermoë bruikbare en betroubare rekords te hou. Die Uitvoerende Komitee van die Distriksgeneeshеervereniging voel egter dat dit wenslik is dat die hou van rekords gestandaardiseer moet word, en vra distriksgeneeshere om met die Voorsitter in verbinding te tree as hulle 'n besonder doeltreffende manier van boekhou kan voorlê, wat kan dien as 'n standaard by die opstel van 'n leiding aan alle distriksgeneeshere.

Die uitslag van ons jarelange bemoeiinge om beter besoldiging vir die werk van deeltydse distriksgeneeshere te verkry, blyk uit bostaande teleurstellende antwoorde op ons betogings. Blykbaar sal ons ons, voorlopig altans, realisties daarby moet neerlê in afwagting van enige verdere besluite wat deur die algemene vergadering van distriksgeneeshere tydens die Kongres in Oktober mag geneem word.

Intussen word beide die Departement en die Mediese Raad genader om uitvoering te gee aan bostaande twee wenke in die verslag van die onderhoud.

PASSING EVENTS : IN DIE VERBYGAAN

The Second World Congress on Fertility and Sterility will be held by the International Fertility Association at Naples, Italy, in May 1956, beginning on 18 May. The major topics of the Congress are the following: (1) Endocrine and Metabolic Factors in Fertility and Sterility; (2) Occupational and Toxic Factors in Relation to Fertility; (3) New Methods of Diagnosis and Treatment of Male Sterility; (4) New Methods of Diagnosis and Treatment of Female Sterility; (5) Diagnosis of Disorders of Ovulation; (6) Diagnosis of Disorders of Spermatogenesis; (7) Treatment of Disorders of Ovulation; (8) Treatment of Disorders of Spermatogenesis; (9) Surgery of Male Sterility; (10) Surgery of Female Sterility; (11) Experimental Investigations in Fertility and Sterility; (12) Problems in Animal Reproduction (Veterinary). Besides the scientific meetings, scientific, medical and technical exhibits will be held, as

well as numerous social and touristic attractions. The official languages will be English, French, German, Spanish and Italian, and there will be facilities for simultaneous interpretation of addresses. Registration fee is U.S. $25.00, and U.S. $15.00 for associate members. Inquiries should be directed to the President of the Organizing Committee, Prof. G. Tesauro, S. Andrea delle Dame, 19, Naples.

* * *

The 6th Congress of the International Association of Hydatidology will be held at Athens, Greece, on 14-18 September 1956, under the Presidency of Dr. M. Maccas. The subjects will include:— (1) Hydatidosis, a professional disease; (2) Hydatid diseases in the Army; (3) Rupture of Hydatid cysts of the liver (*a*) in the lungs and bronchi, (*b*) in the biliary passages; (4) a biological subject; (5) a veterinary subject. The Secretary-General of the Congress is Prof. Adj. B. Kourias, Greek Red Cross, 1 Rue Mackenzie King, Athens, Greece.

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The 13th Annual Health Congress, Pretoria, 1955 will be held by the Health Officials' Association of Southern Africa in the Baker Memorial Hall, 170 Andries Street, Pretoria, on 24-28 October 1955. The Congress will be opened by the Honourable the Minister of Health, Mr. J. F. T. Naude. The papers to be presented will include the following: *Air Pollution*; *Odour Problems in the Chemical Industry*; *Air Conditioning Systems*; *Ventilation*; *The Purification of Sewage and Industrial Effluents*; *The New Legislation for the Control of Water Pollution*; *The Training of Health Inspectors*; *Some Reflections of a Chief Health Inspector*; *Modern Insecticides*; *in Pest Control*, and *Social Services in Public Health Work*. Delegates', fees £3 3s. 0d. Hotel accommodation must be booked through the S.A.R. & H. Travel Bureau and, because of Pretoria's Centenary Celebrations, early booking is essential. The Honorary Congress Secretary is Mr. W. G. Funston, P.O. Box 234, Pretoria.

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Dr. M. M. Suzman, Johannesburg, has accepted an invitation to participate in a symposium on Nutrition in Infection at the New York Academy of Sciences, New York City, on 24 and 25 May 1955. He will be away for a month.

* * *

Summer School for Health Education—Bangor, North Wales. The Central Council for Health Education is arranging a resident course of which the theme will be *Opportunities and Methods in Health Education*, to be held at Neuadd Reichel, the men students' residence of the University College of North Wales, on 16-26 August 1955. This is delightfully situated on the outskirts of the small city of Bangor in the Snowdonia region.

The course is designed to help participants to make the best use of all Health Education facilities in the Home, the School, the Hospital, the Factory and the Community, and to improve their knowledge and skill in the use of educational methods and media in these various fields. Lectures will be given, but the main work of the School will be done in Discussion Groups under experienced tutors. Demonstrations of modern methods of teaching and publicity, public speaking and group leadership, and practical sessions for the construction of a wide range of Health Education material such as flannelgraphs, posters, filmstrips, etc. will be included in the programme. The production of short documentary films will be demonstrated with student participation. A joint committee of tutors and students will be formed.

The course is designed for Medical Officers in the public health service, in hospitals and in industry, as well as for Nurses, Education Officers, Social Workers, Welfare Officers, Training College Lecturers, Sanitary Inspectors, Teachers *et al.* A number of students will be appointed to attend by local authorities in the U.K.

The inclusive fee for the course will be £17 6s. 6d. (tuition £7 17s. 6d.; residence £9 9s. 0d.) Of this, £2 2s. 0d. is payable on registration. Each student will have a single bed-sitting room with running hot and cold water. Applications should be made to The Medical Director, The Central Council for Health Education, Tavistock House, Tavistock Square, London, W.C.1.

* * *

Dr. Leon Sunn, M.B., B.Ch. (Rand), M.R.C.P., has taken over the practice of Dr. Vincent P. Norman, C.N.A. Building, East London, and will continue to practise as a specialist physician at that address. Dr. Sunn was on the staff of the Medicine Department of the University of the Witwatersrand and Assistant at the Endocrine Clinic of the Johannesburg General Hospital.

* * *

The Sixth International Congress of Otolaryngology will take place in Washington, D.C., U.S.A., on 5-10 May 1957, under the presidency of Dr. Arthur W. Proetz. The selected subjects for the 3 plenary sessions will be: (*a*) Chronic Suppuration of the Temporal Bone; (*b*) Collagen Disorders of the Respiratory Tract and (*c*) Papilloma of the Larynx. Internationally recognized authorities will open the discussion on each of these subjects. Two types of communications are invited: (1) Original papers, limited to 15 minutes and (2) contributions to the discussion, limited to 5 minutes. These should be in one of the 4 official languages—English, French, German and Spanish. Motion picture films will be shown continuously except during the plenary sessions, and there will also be scientific and technical exhibits. A programme of tours, social functions and visits to local points of interest have been arranged for associate members. Subscription for members U.S. $25.00; ladies and other relatives accompanying members may be registered as associates and the fee is U.S. $10.00. The General Secretary is Dr. Paul H. Holinger, 700 N. Michigan Avenue, Chicago 11, Ill., U.S.A.

* * *

Dr. Lucie van Dam, who has been ill as the result of an accident, has resumed consulting-room practice as a specialist psychiatrist at 43 Mill Park Road, Port Elizabeth. Telephone 69006.

THE BENEVOLENT FUND : DIE LIEFDADIGHEIDSFONDS

The following contributions to the Benevolent Fund during February, March and April 1955 are gratefully acknowledged.

Votive Cards in Memory of:

Mr. F. E. Maggs *by* Dr. and Mrs. M. Meyers.
Mrs. Grace Ward *by* Dr. Vernon Brink.
Dr. N. C. O'Byrne *by* Dr. R. C. J. Hill.
Dr. M. G. Drummond *by* Dr. A. W. Sichel and Dr. Patricia Massey.
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Mr. Greg. Joyce *by* Dr. J. J. van Zyl.
Dr. Gustav Liebenberg *by* Dr. Desmion Liebenberg.
Dr. E. F. W. Moon *by* Dr. A. W. Sichel.

Total amount received from Votive Cards: £23 2s. 0d.

Services rendered to:

Mrs. Dr. J. Walls *by* Drs. F. Benjamin and P. Hafner.

Mrs. Dr. R. E. Bauling *by* Drs. F. Geldenhuys, James Uys and van Tonder of Pretoria and Dr. W. S. Snyman and Dr. D. F. Marais of Witbank.

Mrs. M. Mattinson *by* Drs. A. Stewart and P. Wentzel.

Dr. J. D. McLaren *by* Dr. A. E. Pinniger.

Dr. Eric J. Dyke *by* Drs. A. W. Stewart, A. J. Biesman-Simons, Leo Mirkin, J. Lee and A. F. de Villiers of Port Elizabeth and Drs. Robert Melvin and J. K. McCabe of East London.

Mrs. Gordon, Mother of Dr. Mary Gordon *by* Dr. Teddy Schneider.

Dr. H. G. Zail *by* Dr. S. J. Fleishman.
Dr. D. H. R. Vollet *by* Drs. H. B. Savage and J. W. Pugh.
Mrs. I. J. Zadikoff *by* Dr. J. F. Ainslie.
Dr. A. J. van der Spuy *by* Dr. J. G. du Toit.
Dr. Jeanette Murray *by* Dr. A. W. Sichel.
Dr. D. A. Grundlingh *by* Drs. Javett and Braudo and Dr. H. Mendelow.
Dr. V. P. Norman *by* The Cape Town Agency.

Total amount received from services rendered: £78 16s. 0d.

Donations:

	£	s.	d.
Members of the Cape Western Branch (Collection Box) ..	2	18	2
Balance of the refund of £30 made in 1952 after the Congress	1	13	0
'Anonymous'	1	11	0
Dr. J. Morris	1	1	0
Dr. M. J. Cohen		10	6
Dr. S. E. Rolfe		13	6
Dr. H. P. G. Militz		10	6
Dr. D. F. Waspe		10	6
Dr. D. F. Symonds		10	6
Dr. R. P. Stafford	1	1	0
Dr. J. A. Currie	1	1	0
Dr. I. Sagor		13	6
Dr. A. H. Baxter		10	6
Dr. J. S. M. Sililo		10	6
Dr. J. D. Woods		10	6
Dr. E. van Wyngaard		10	6
Dr. A. L. van der Merwe ..		10	6
Dr. S. Kahn		10	6
Dr. W. E. McLelland		10	6
Dr. K. P. Haslop	1	1	0
Dr. J. van Schalkwyk		10	6
Dr. H. F. Schiller	1	1	0
Dr. E. M. Broome		10	0
Dr. F. G. Shearing	1	1	0
Dr. E. F. Hafner	1	1	0
Dr. D. H. Biggs		10	6
Dr. W. Fabian		10	6
Dr. C. R. McKenzie		10	6
Dr. H. H. Stormanns		10	6
Dr. B. M. Porter	1	1	0
Dr. B. A. Armitage		10	6
Dr. J. R. Reznek		10	6
Dr. P. V. MacGarry		10	6
Dr. E. L. Galgut		10	6
Dr. C. C. Akerman		10	6
Dr. H. A. Edwards		10	6
Dr. D. A. C. Kelly		10	6
Dr. P. N. Smith		10	6
Dr. C. de Wet Meintjies ..		10	6
Dr. R. D. Osler		10	0
Dr. H. E. C. Corkery		5	0
Dr. H. Levin		10	6
Dr. P. D. G. Quirke		10	6
Dr. R. Westphal	1	1	0
Dr. I. Friedman	1	1	0
Dr. G. H. de Vos		10	0
Dr. E. C. Fristedt		10	0
Dr. A. B. Swarbreck	2	7	6
Dr. R. R. MacKenzie		10	6
Dr. D. G. Cowie		10	6
Dr. R. P. Seymour		10	6
Dr. K. M. Brooks		10	6
Dr. N. J. A. Forder		10	6
Dr. E. Frankinfeld		10	6
Dr. C. D. Scott		10	6
Dr. H. L. Cohen	1	6	0
Dr. M. J. Harman	2	2	0
Dr. R. D. le Roex		10	6
Dr. A. F. Stewart	1	0	0
Dr. L. L. Nel		5	0
Dr. H. Saacks		10	6
Dr. H. Simon		10	6
Dr. C. L. L. Murray		10	0
Dr. N. McL. Campbell ..		10	6
Dr. N. L. Murray	1	0	0
Dr. S. H. Daneel		10	6
Dr. A. L. Rencken		10	6
Dr. L. Sive		10	6
Dr. J. Smith		11	0
Dr. F. W. van der Westhuizen		10	6
Dr. A. Seele		10	6
Dr. W. Waks		5	0
Dr. R. N. Wilson		10	6
Dr. E. T. Dietrich	1	1	0
Dr. W. J. Perkins		10	6
Dr. H. H. Broodryk		10	6
Dr. J. W. Stirling		10	6
Dr. C. G. A. Simonsz		10	6
Dr. T. H. R. Bohlmann ..	1	1	0
Dr. J. H. T. Human	10	10	0
Dr. E. L. Batchelor		10	6
Dr. G. Borok	2	2	0
Dr. A. Asherson		10	6
Total	£172	7	8

NEW PREPARATIONS AND APPLIANCES : NUWE PREPARATE EN TOESTELLE

Meticorten (Prednisone) and Meticortelone (Prednisolone)—Schering. Scherag (Pty.) Ltd., Johannesburg, make the following announcement:

Meticorten is now available in South Africa. It was formerly known under the generic name of Metacortandracin, but will in future be described generically as Prednisone. Similarly, the generic name of Meticortelone (not yet available) has been changed from Metacortandralone to Prednisolone.

These products are the result of a research programme carried out in the Schering Laboratory, Bloomfield, New Jersey, U.S.A. to find more effective anti-inflammatory and antirheumatic agents, free of undesirable side actions.

Clinical data on hundreds of patients treated with Meticorten indicate that the new compound is 3-5 times as effective as cortisone and hydrocortisone in rheumatoid arthritis. Undesirable cortisone and hydrocortisone side actions have been remarkably slight. Objective and subjective improvement have been noted within 24-48 hours following initial doses of 20-30 mg. daily. In therapeutic doses there has been an avoidance of sodium retention, weight gain due to fluid retention, and excessive potassium depletion. Meticorten has lowered sedimentation rate when cortisone or hydrocortisone had ceased to be effective. Most effective at smallest dosage, it has provided better relief of pain, swelling, tenderness and joint stiffness.[1,2]

The use of Meticorten in the treatment of rheumatic fever, disseminated lupus erythematosus, nephrosis and intractable allergies is being investigated. Preliminary reports on the results obtained in these indications have been promising.

Present plans call for the release of Meticortelone, the second in this series of new steroids, in the near future.

REFERENCES

1. Bunim *et al.* (1955): J. Amer. Med. Assoc., 22 January.
2. Boland and Headley (1955): California Med., February, p. 69.

BOOK REVIEWS : BOEKRESENSIES

THERAPEUTIC INDEX

A Therapeutic Index. By C. M. Miller, M.D. (Lond.), M.R.C.P. (Lond.) and B. K. Ellenbogen, M.D. (L'pool), M.R.C.P. (Lond.) First Edition. (Pp. 147. 12s. 6d.) London: Bailliére, Tindall and Cox. 1955.

Contents: 1. Therapeutic Index. 2. Dosage Tables. 3. Practical Procedures. 4. Simple Urine Examinations. 5. Some Useful Diets. 6. Infectious Fevers. 7. Normal Values. 8. Approximate Equivalents and Conversion Factors.

Owing to recent rapid advances in knowledge therapeutics has become more rational and scientific than ever before. This has placed a heavy burden and responsibility on the practitioner to keep abreast of modern developments. It is debatable whether a book of this small size can possibly deal adequately with such a large and complex subject. If it is granted that it can serve a useful purpose then all treatment advocated should in 1955 have as sound a pharmacological and physiological basis as possible.

This book is disappointing because it has not adopted this approach, with the result that much that is irrational creeps into the text. For example, penicillin is advocated for orchitis regardless of aetiology. It is recommended that patients with nephritis should be nursed uncomfortably between blankets 'because it is

customary', and that thyroid should be given for subacute nephritis. The dosage tables refer only to the newer antibiotics, whereas it would be most useful to have a much more comprehensive list.

The treatment advocated for most medical emergencies is adequate and clearly set out but all in all this book attempts too much in too little space and does it badly.

J.H.

BRACHIAL ANALGESIA

Local Analgesia: Brachial Plexus. By R. R. Macintosh, M.A., D.M., F.R.C.S., F.F.A.R.S.S., D.A. and William W. Mushin, M.A., M.B., B.S. (Lond.), M.R.C.S., F.F.A.R.C.S., D.A. Third Edition. (Pp. 62, with illustrations. 10s. 6d.) Edinburgh and London: E. & S. Livingstone Ltd. 1954.

The appearance of this, the 3rd edition, speaks in itself of the continual demand for this very excellent little book. Macintosh and Mushin have, with this book, made a very real and valuable contribution to the literature of anaesthetics.

Brachial-plexus block is a reliable and technically simple nerve-block. It is unfortunate that it is not more widely practised by the occasional anaesthetist, and by surgeons who from necessity must work single-handed. By its use all the dangers of an inhalation anaesthetic are avoided. This is particularly important in patients with traumatic injuries to the arm associated with a full stomach. A further advantage is that the patients remain ambulatory and can often return home within an hour.

The essential requirement for a successful nerve block is a knowledge of the anatomy. To many, dismal memories of second-year anatomy would be enough to dismiss all thoughts of practising this technique. In this book, however, the essential relations of the brachial plexus have been most clearly and simply illustrated in colour. The aim has been to describe the technique pictorially rather than in longhand. It is certainly far easier to see how a nerve block is performed than to have to read a description of the technique.

Xylocaine (½-1%) is the analgesic solution preferred by the authors. The use of hyaluronidase is also mentioned. A brief history of the method is given and it is interesting to note that the infraclavicular, axillary and paravertebral approaches have all been employed in the past. The superclavicular approach, which is now commonly used, is undoubtedly the simplest in that all it requires is an ability to locate the first rib. Except in the obese this can usually be palpated through the skin without any difficulty.

The authors are to be congratulated on producing a book which stands above criticism, and it deserves a worthy place on the bookshelves of all who are required to give anaesthetics.

P.R.M.

GROWTH AND DEVELOPMENT

Growth and Development of Children. By Ernest H. Watson, M.D. and George H. Lowry, M.D. Second Edition. (Pp. 296, with illustrations. $7.00.) Chicago, U.S.A. The Year Book Publishers Inc. 1954.

Contents: 1. Introduction. 2. Heredity and Environment Factors. 3. Fetal Growth and Development. 4. Normal Physical Measurements. 5. The Premature Child. 6. Behavioral Development. 7. Organ Development. 8. Osseous Development. 9. Role of the Endocrine Glands in Normal Growth and Development. 10. Energy Metabolism. 11. Nutrition in Normal Growth. 12. Facial Growth and Dentition. 13. An Outline of Abnormal Growth. Index.

At present there is a bewildering spate of new text-books of paediatrics and related subjects. In most of them growth and development is dealt with relatively briefly in comparison with descriptions of disease, feeding methods etc. On the other hand, books devoted entirely to growth and development tend to be cumbersome and difficult to read. This does not apply to this small and inexpensive volume, which originated from a series of lectures given to the undergraduate students at the University of Michigan. It was later expanded for the use of graduate students and paediatric residents and now in its 2nd edition contains a store of useful information. Every important statement is backed by a good and very up-to-date reference in the bibliography that one finds at the end of each chapter.

The authors' approach is a sound and sensible one. In the section on heredity they point out that the inheritance of the urge to grow normally and the over-all similarity of development among children has received little attention. The problem is complex but the implications are great.

The development of every organ and system in the body from the time of conception to puberty is briefly outlined, with particular emphasis on the important physiological aspects. The most generally accepted standard tables and graphs of normal physical measurements are outlined with suitable comments on their particular uses and disadvantages.

Behavioural development is well, if superficially, dealt with and the norms of behaviour at different ages are tabulated. Osseus development and its radiology are clearly presented and the changing patterns of posture with age is emphasized. There is a chapter on growth and development of the face, jaws and teeth, and tooth eruption and malocclusion, which contains information not readily found elsewhere.

All in all this is a useful book both as a reference for those in practice and as a text for those studying for examination.

J.H.

PRACTICAL OBSTETRIC PROBLEMS

Practical Obstetric Problems. By Ian Donald, M.B.E., M.D., B.S. (Lond.), B.A. (Cape Town), M.R.C.S. (Eng.), L.R.C.P. (Lond.), M.R.C.O.G. (Pp. 578 + xii, with illustrations. 54s.) London: Lloyd-Luke (Medical Books) Ltd. 1955.

Contents: 1. The Scope of Antenatal Care. 2. Abortion. 3. Special Cases. 4. The Cardiac Case. 5. Diabetes Mellitus. 6. Anaemia and Pulmonary Tuberculosis. 7. Symptom Complexes. 8. Local Abnormalities. 9. Toxaemias of Pregnancy. 10. Urinary Complications. 11. Twins and Hydramnios. 12. Breech Presentation. 13. Face and Brow Presentation. Shoulder Presentation. Prolapse of the Cord. 14. Antepartum Haemorrhage. 15. Induced Labour. 16. Disproportion. 17. Relief of Pain. 18. Prolonged Labour. 19. Technique and Pitfalls of Forceps Delivery. 20. Resuscitation of the Newborn. 21. Postpartum Collapse. 22. Postpartum Haemorrhage. 23. Maternal Injuries. 24. Caesarean Section. 25. Infection. 26. The Use and Misuse of Antibiotics. 27. Postmaturity. 28. Prematurity. 29. R.H. Factor. Appendices. Index.

The author has had a good season and is to be congratulated: he has been made a Regius professor, has written a book, and has been raised to the fellowship of his College. The book was written because 'there is a place for a book of a practical sort which would appeal to the clinician who lives in the rough and tumble of it all, as well as to aspirants for additional diplomas in the subject'.

The volume is attractive, and the author's approach to the subject is vigorous. Four chapters are contributed by other experts. The policy was to write as a teacher and to stimulate, and quite emphatically to be original. It is however repeatedly seen that the author is still fettered by orthodoxy and tradition, and the process of breaking his bonds robs him of most of his energy. One is therefore not surprised to find how sound in learning the substance of this work is; it has laid the foundation for what might be subsequently shaped into a classic.

It is difficult to justify the many small books on Obstetrics written by British authors. One looks to Britain for a large comprehensive reference book such as America has given us or like those by Continental scholars. The expert deals with what is fashionable at the moment, but the precious gift derives from the wisdom of him who considers the more permanent fundamentals and perspectives. These works demand time and scholarship, neither of which is readily exercised in the practice of intensive Obstetrics, the third essential.

The present author has made a number of mistakes of the immature kind, a typical example being that haemorrhage may occur when retraction is not fast enough to catch up with contraction. Nevertheless, the book represents London at its best, and there is every promise that the Professor will develop such power and independence of thought in his new sphere that he will give us a classic presently.

O.S.H.

THREE PSYCHOLOGICAL CASES

Three Men—An Experiment in the Biography of Emotions. By Jean Evans. (Pp. 297 + xviii. 15s.) London: Victor Gollancz Ltd. 1954.

Contents: 1. Johnny Rocco. 2. Follow-up: September 1952. 3. William Miller. 4. Follow-up: November 1951. 5. Martin Beardson. Afterword.

Jean Evans has cast her book in a very vivid pattern. Each of the 'three men' is a psychological problem. She has portrayed the

autobiography of each case without any attempt at diagnosis or treatment, giving excellent case histories together with a follow-up. The three subjects are genuine, names and places only being altered. This book reads excellently and all three cases stand out vividly.

Two main impressions arise: Firstly a desire to diagnose each case. Yet not one of the three characters appears to fit as an entity into the conventional psychiatrical pigeon-holes one is familiar with; but is this not the more realistic, how often does one strike the true text-book case in any walk of medicine, especially psychiatry? To quote Dr. Gordon W. Allport, who wrote the introduction, 'it is a temptation to comment in detail on Johnny, Miller and Martin. They are so viable and so insistent that every reader will feel impelled to diagnose, interpret and prescribe. But if I personally yielded to the temptation, I should be taking unfair advantage of the reader and of the author'.

The second impression is one of a continuity of theme running through all three cases; firstly, all the subjects appeared to have had adverse early home conditions; secondly, the early memories of the maternal influence appear to predominate abnormally in later life; and thirdly, all three subjects were sensitive children.

Johnny Rocco was one of the younger members of a large family of Italian extraction living in a large American City; poverty and environmental factors wreaked havoc with his sensitive nature, the 'seed' undeniably was there, the 'soil' fertile; the result social rebellion, clashes with the local police and reform school. However, the young misfit later finds a form of haven with a humble home of his own in a far better environment and appears to find a stabilizing factor in the pleasures of his two young children.

William Miller is of a different sort, an orphan. From an early age he became markedly introverted and reclusive, and thrown entirely on his own resources. Theft was one of the outcomes. His misfortunes include blindness. To what degree this handicaps him in his endeavours to better his predicament and to what degree he used it as a means of obtaining sympathy, comfort and escape from any difficult problem, one is not sure.

Martin Beardson is a young homosexual. His early background although unhappy is slightly more fortuitous than that of the other two. His mental problem presents a mixture of passive homosexuality coupled with a fear of the male sexual climax on his part at any time, and an underlying appreciation of the unnaturalness of his actions. His whole existence appears wrapped around a battle with himself and his sex desires.

This book can be strongly recommended to medical and lay readers alike, and especially to sociologists and those interested in psychology and psychiatry. It has a limited value for the criminologist. The author is to be complimented.

P.L.W.

YEAR BOOK OF DRUG THERAPY

The Year Book of Drug Therapy (1954–1955 *Year Book Series*) Edited by Harry Beckman, M.D. (Pp. 592, with 74 illustrations. $6.00) Chicago: The Year Book Publishers, Inc. 1955.

Contents: 1. Introduction. 2. Allergy. 3. Antibiotics and Sulfonamides. 4. Cardiovascular Diseases. 5. Dermatology. 6. Endocrinology. 7. Gastro-enterology. 8. Hematology. 9. Internal Medicine. 10. Neuropsychiatry. 11. Obstetrics and Gynecology. 12. Ophthalmology. 13. Otorhinolaryngology. 14. Pediatrics. 15. Surgery. 16. Venereology. Index.

This new annual volume covers articles from journals received between August 1953 and August 1954. It is a valuable book of reference for recent advances in therapy. There cannot be many subjects of interest to the general physician which are not touched on. Under each heading the book is a ready reference to recent advances. The 3-page introduction by the Editor constitutes a useful review of trends in the last year. In it the advances and retreats are faithfully recorded. Of course there are retreats, because American therapy is always inclined to be optimistic. Among the retreats are from hydrazinophthalazine (apresoline) as an antihypertensive drug, from fumagillin for intestinal amoebiasis, from trypsin for systemic administration and from N-allylnormorphine as a direct stimulant of the respiratory centre.

The advances are too numerous to record in this review. A few that may be new to South African readers include phenylbutazone for sub-acute superficial thrombo-phlebitis, magnamycin for granuloma inguinale, and daraprim (suppressive) and primaquine (causal prophylactic) against vivax malaria.

The practice of editorial comment as a footnote to certain reviews is a healthy one in the hands of a balanced editor, particularly when it restrains unjustified enthusiasm. Of interest to readers in South Africa will be the editorial view that in the scramble to introduce new anticoagulants in competition with dicoumarol 'the original drug will retain its feet until it can be shown for a rival agent that is not only a superior anticoagulant but also as free as dicoumarol from side or toxic actions.'

Light is thrown on the propensity of American editors and reviewers to ignore most articles not published in American journals by a random count of the articles reviewed in 50 consecutive pages. Of 31 articles three were from the English press, two from the Continental press and the remaining 26 from American journals.

J.F.B.

13th April, 1955

AMPHETAMINE

Amphetamine in Clinical Medicine Actions and Uses. By W. R. Bett, M.R.C.S., L.R.C.P., F.R.S.L. Leonard H. Howells, M.D., F.R.C.P. and A.D. MacDonald, M.A., M.D., M.Sc. (Pp. 78. 7/6d.) Edinburgh & London: E. & S. Livingstone Ltd. 1954.

Contents: 1. Historical Introduction. 2. Pharmacology. 3. Overweight. 4. Fatigue and Depression. 5. Narcolepsy. 6. Alcoholism and Other Drug Additions. 7. Barbiturate Intoxication. 8. Psychopathic States. 9. Enuresis and Other Behaviour Disorders in Children. Index.

This very short review of the actions and uses of Amphetamine compounds (it can be read quite comfortably in an hour or two) is brimful of interesting and useful information.

The chapters on fatigue and depression and on psychopathic states and behaviour disorders in children are especially interesting. The definite statement that addiction, in its proper sense, does not occur, is reassuring but may not be accepted by everyone.

In all, this is a valuable little book which is unreservably recommended, especially to general practitioners.

H.M.

SURGICAL PHYSICAL SIGNS

Demonstrations of Physical Signs in Clinical Surgery. By Hamilton Bailey F.R.C.S., F.A.C.S., F.I.C.S., F.R.S.E. and Allan Clain, M.B. F.R.C.S. Twelfth Edition. (Pp. 456.+xii. 681 illustrations. 38s. 6d.) Bristol: John Wright & Sons Ltd. 1954.

Contents: 1. Introduction. 2. Some Basic Physical Signs. 3. Localized Swellings 4. Signs of Local Inflammation; Ulcers and Sinuses. 5. Suspected Fractures; Examination of Joints. 6. The Mouth 7. The Salivary Glands. 8. The Face and Jaws. 9. The Head. 10. The Ear. 11. The Orbit. 12. The Neck (Excluding the Thyroid Gland.) 13. The Thyroid Gland. 14. The Breast and Axillary Lymph-Nodes. 15. The Thorax. 16. The Shoulder, Arm, and Forearm. 17. The Wrist and Hand. 18. Hernia. Lymphatics of Groin. 19. Non-Acute Abdominal Conditions. 20. Non-Acute Abdominal Conditions—Special Demonstrations. 21. Rectal and Vaginal Examination. 22. Clinical Examination of the Urinary Organs. 23. The Male Generative Organs. 24. Common Acute Abdominal Conditions. 25. Abdominal and Pelvic Injuries. 26. Some Rarer Acute Abdominal Conditions. 27. The Spine and Sacro-iliac Joints. 28. The Hip-Joint. 29. The Knee-Joint. 30. The Leg and Foot. 31. Bone. 32. The Peripheral Nerves. 33. The Blood-Vessels of the Extremities. 34. Some Signs to Confirm a Suspicion of Neurosis. 35. Supplementary Physical Signs. Glossary. Index.

Every teacher of surgery is grateful to Mr. Hamilton Bailey for his Demonstrations of Physical Signs, which have now reached their 12th—and best—edition in 27 years. Most of us cut our surgical teeth on one or other edition of this book. This last edition is the most pleasing because the illustrations are clearer, and their choice better than ever before. It is a phoenix of a book.

The size of the present edition, at 456 pages and 681 illustrations, almost prevents it from fitting the pocket. This is a pity, because its handy size in the earlier editions was a great advantage. However, it still fulfils precisely the aims stated in the preface, and epitomized in Sir Henry Wade's aphorism quoted on the fly leaf, 'the wards are the greatest of all research laboratories.'

Every undergraduate and postgraduate student—indeed every doctor who has a sense of the artistic pleasure of clinical observation —who does not already own a 'Hamilton Bailey,' should get this one.

R.D.H.B.

CORRESPONDENCE : BRIEWERUBRIEK

JOURNAL OF THE SOUTH AFRICAN LOGOPEDIC SOCIETY

To the Editor: The South African Logopedic Society (Society of Speech Therapists) publishes a Journal in May and October of each year. Articles deal with the organic and psychological aspects of speech defects, and include subject matter of interest to the medical and allied professions.

Relevant contributions in the fields of neurology, otolaryngology and maxillo-facial surgery are invited.

Subscriptions are 10s. per annum including postage and should be addressed to The Editor, Journal of the S.A. Logopedic Society, Witwatersrand University, Milner Park, Johannesburg.

Celeste Ordman
Editor, Journal of the S.A.L.S.

Witwatersrand University
Milner Park
Johannesburg
12 May 1955

THE SWART REPORT

To the Editor: I have read the letter written by *Arme Ou*[1] in your issue of 30 April with reference to the Swart Report. It is obvious that *Arme Ou* is not aware of the important and difficult task that devolved on Dr. Vercueil, Chairman of the R.M.O. Group, who represented the views of all R.M.Os. on the Commission of Investigation, which consisted in addition of 5 members representing the interests of the Railway Administration as well as of the Members of the Sick Fund. Had *Arme Ou* been informed on this aspect of Dr. Vercueil's labours, I am certain he would not have criticized Dr. Vercueil as implied in his letter. I can assure *Arme Ou* that, at all times when it was necessary, Dr. Vercueil ably and fearlessly championed the cause of the Railway Medical Officers, and at no time sacrificed fundamental principles; and although in the report itself Dr. Vercueil is recorded as opposing only one recommendation, it does not follow that he or the R.M.O. Group are in full agreement with all the other recommendations contained in the report. It is well known that throughout the investigation Dr. Vercueil stoutly and energetically opposed many of the suggestions and recommendations which he considered were not in the best interests of the Railway Medical Officers and/or the Sick Fund. Dr. Vercueil constantly consulted and canvassed the views of the members of the R.M.O. Executive Committee throughout the lengthy course of the investigation, and made those views known to the other members of the Committee of Investigation before the report was finally drawn up.

M. Cohen
Hon. Secretary-Treasurer, R.M.O. Group (M.A.S.A.)

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Johannesburg
20 May 1955

1. *Arme Ou* (1955): S. Afr. Med. J., **29**, 424.

CARDIAC FAILURE

To the Editor: Your editorial on this subject[1] is misleading. The writer commences by stating that he is quoting from L. N. Katz's 'concept' of the mechanism of cardiac failure (with which he obviously agrees), and goes on to use this opinion to dismiss authoritatively some other 'concepts' of the dymanics of cardiac failure.

His four compensatory mechanisms are physiologically self-evident, but to define accurately cardiac reserve in any one heart in terms of dilatation, hypertrophy, heart rate and contractile power alone is seldom feasible or wise. What is known, however, is that dilatation, hypertrophy and contractile power may be unevenly affected in the two ventricles, which gives rise to the 'loose thinking associated with the concept of so-called right and left heart failure'. Any sustained disparity in the output of the two ventricles is obviously incompatible with the maintenance of the circulation and therefore with life, but the cardiac reserve of one chamber in relation to that of the other may be so diminished as to produce temporary disparity in output, as for instance when an individual with an infarct of his left ventricle raises the output of the right by exercising or lying flat in bed. Failure then, if it implies total failure, is a misnomer, but partial failure or 'incompetence' of the heart adequately to maintain output (in terms of cardiac reserve) may be one-sided.

L. N. Katz 'scorns' (the writer's words) the terms low-output and high ouput failure. These concepts, as developed particularly by McMichael, do not seem to have been accepted on the other side of the Atlantic. However, the British School still considers them as a constructive hypothesis; no more, no less.

In conclusion, if the writer's and L. N. Katz's quarrel are with nomenclature alone, then this could have been stressed as the subject of the editorial; but if it is with the dynamics of the circulation as expressed by others, then the opinion of as eminent a cardiologist as L. N. Katz must be warmly welcomed as yet another concept of this very complex problem.

J. Kelman Drummond

36 Norfolk Road
Durban
20 May 1955

1. *Editorial* (1955): S. Afr. Med. J., **29**, 459 (14 May).

MENINGEAL INFECTION WITH CRYPTOCOCCUS NEOFORMANS (TORULA HISTOLYTICA)

To the Editor: The following unusual case came under my care recently:

On 31 March 1955 a Bantu mother brought her female child, aged 2 years, to me with a 3 days history of restlessness, feverishness and cough.

Examination revealed a rather ill-looking child with a temperature of 101° F. The tongue was heavily furred, respirations were laboured, and the child was very irritable. There were scattered rales and crepitations throughout both lung fields. No neck rigidity or neck retraction was detected, and nothing of note in the ears or throat.

In view of the concomitant lung findings and central nervous involvement a diagnosis of tuberculous meningitis was entertained. I advised hospital treatment, but this was refused.

Two days later they brought the child to me again and her condition had obviously deteriorated. She was stuporose and dyspnoeic and had refused to take any nourishment. The lung signs were still marked and there was a suspicion of neck retraction. The patient was admitted to Heilbron Hospital but, in spite of all measures, continued to decline, sank into coma, and finally died on 11 April without having regained consciousness.

A lumbar puncture was performed on 9 April; the cerebrospinal fluid was clear and there was no block; the pressure was not measured. The South African Institute for Medical Research, Johannesburg, reported on the fluid as follows:

No tubercle bacilli were found by direct examination, but Torula histolytica was present. Cell count—24 polymorphonucears, 121 lympnocytes and 290 erythrocytes per c. mm. Total protein 200 mg.%. Sugar 28 mg.%.

I believe this to be a rare condition, especially in a patient of this age, and would be interested to hear from colleagues whether they have had a similar case. The eventual outcome in the cerebrospinal type of torulosis is, I believe, nearly always fatal.

H. Judelman

P.O. Box 1
Heilbron, O.F.S.
21 May 1955